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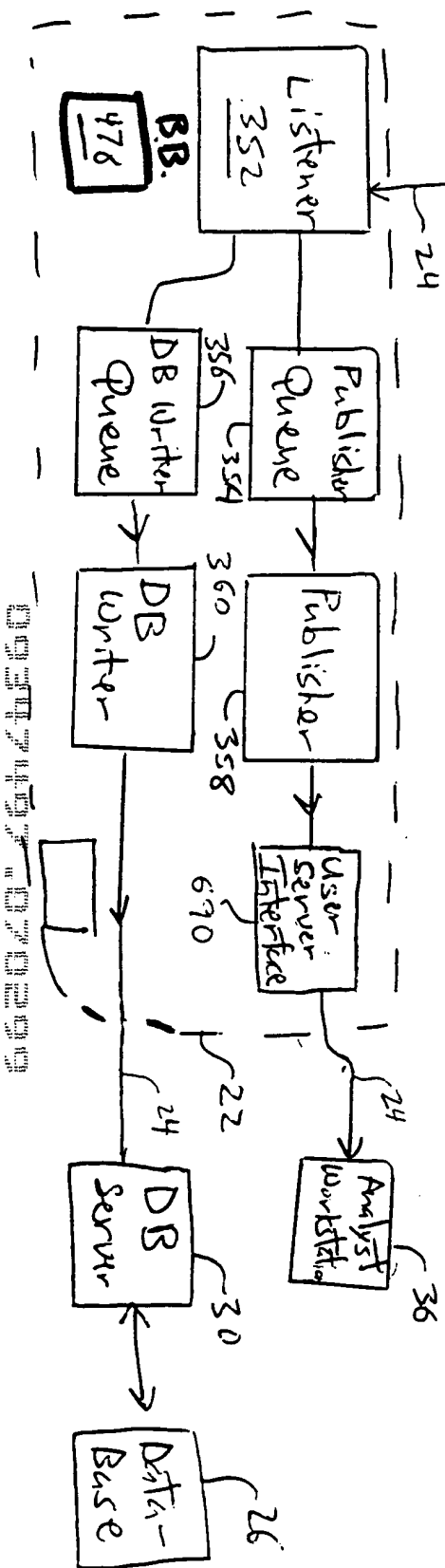
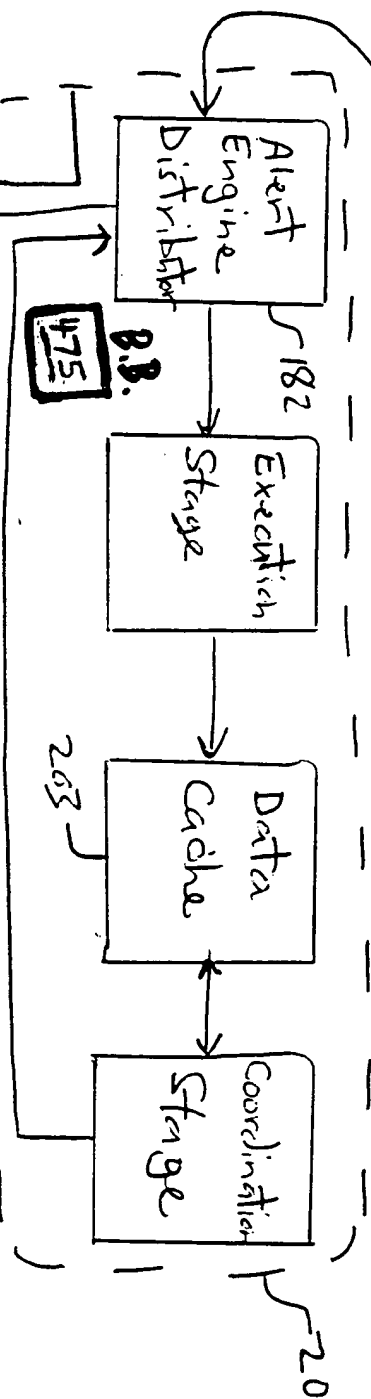
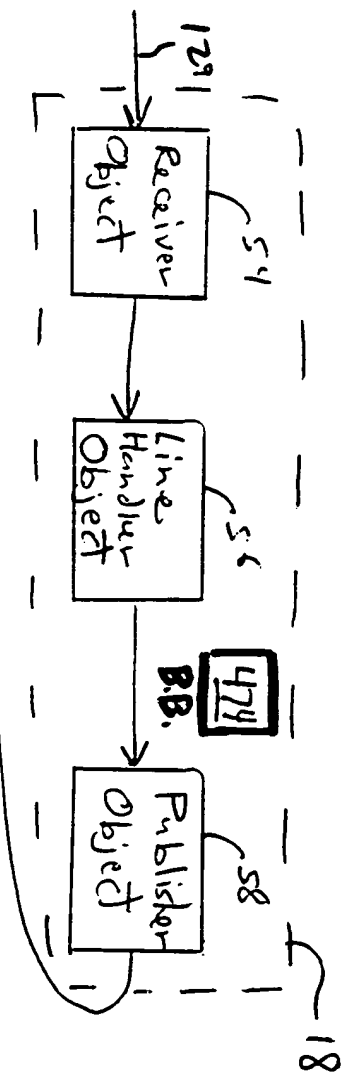
The diagram illustrates a Primary System architecture. At the top, a box labeled "NODS (via TIBCO)" is connected to a "Line Handlers" component (18, 18'). Below this is an "Alert Engines" component (20, 20'). Next is an "Alert Dispatchers and User Servers" component (22, 22'). This is followed by "Database Servers" (30, 30') and an "Operations Server" (32, 32'). At the bottom of the Primary System is an "Operations W/S" component (34, 34'). To the right of the Primary System is a "Primary Analysts" section containing "Analyst Workstations" (36, 36') and "Administrator Workstations" (38, 38'). A large bracket labeled "10" encompasses the entire system. Arrows indicate data flow between components and between the Primary System and the Analysts section.

A diagram of a 2x2 multiplexer. It consists of two rectangular blocks, each labeled with $\underline{18}$, representing 18-bit inputs. These inputs are connected to two output lines on the right. A bracket on the right side of the output lines is labeled 24 . The output lines are also connected to two input lines on the left. A bracket on the left side of the input lines is labeled 12 . An arrow labeled $12a$ points to the left input line, and an arrow labeled $12b$ points to the right input line.

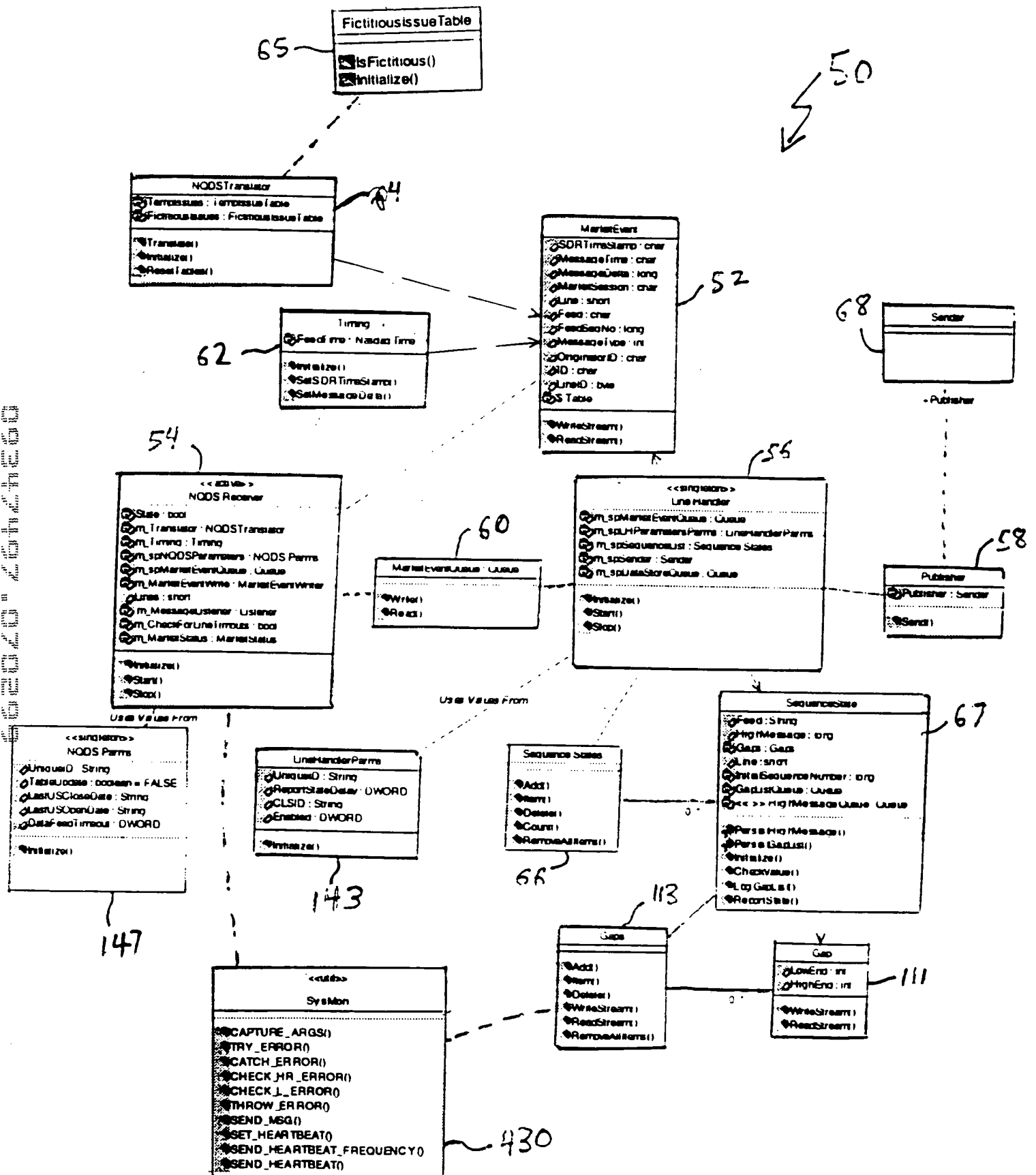
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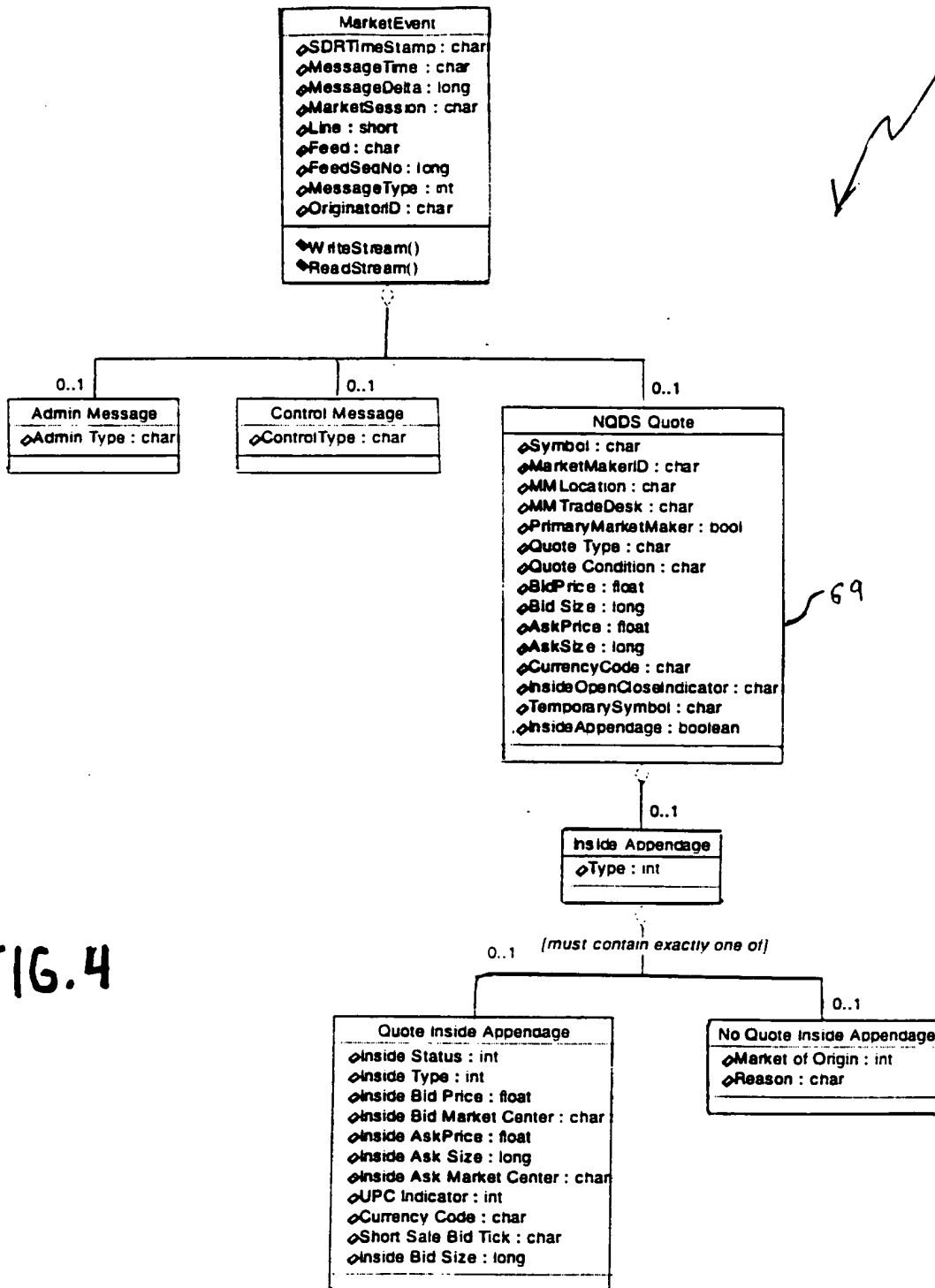
1. The first part of the document is a list of references. The references are listed in a standard format, with the author's name, the title of the work, and the publisher. The references are as follows:

FIG. 1B



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53 ↘

FIG. 5

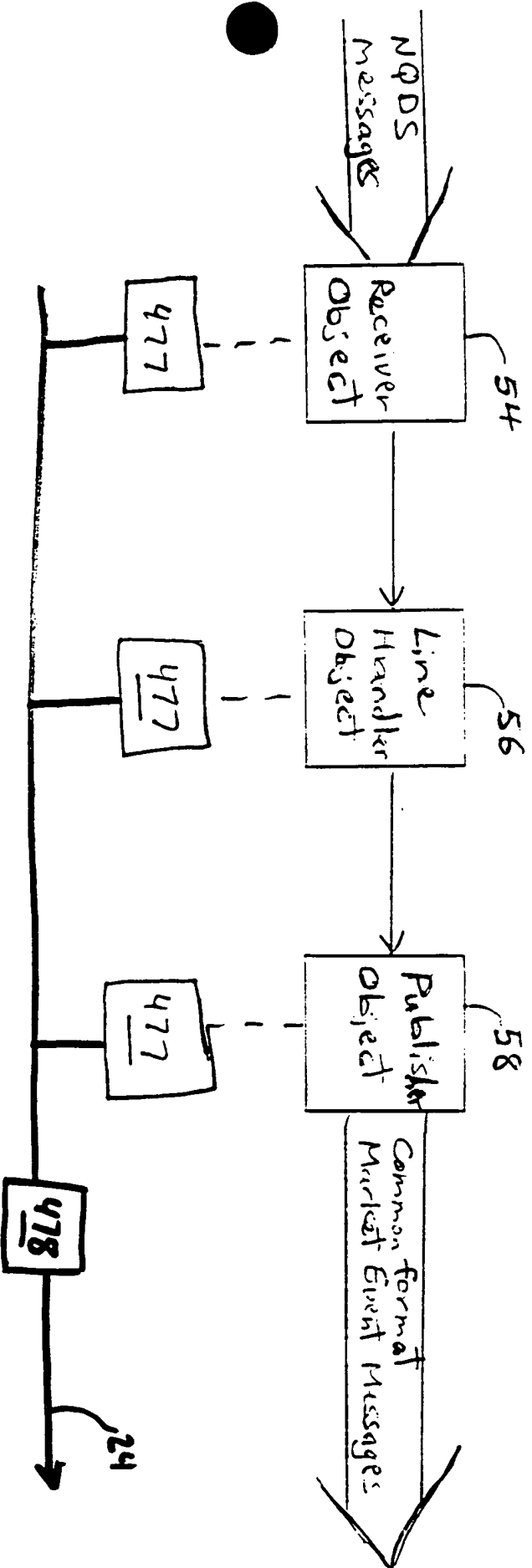
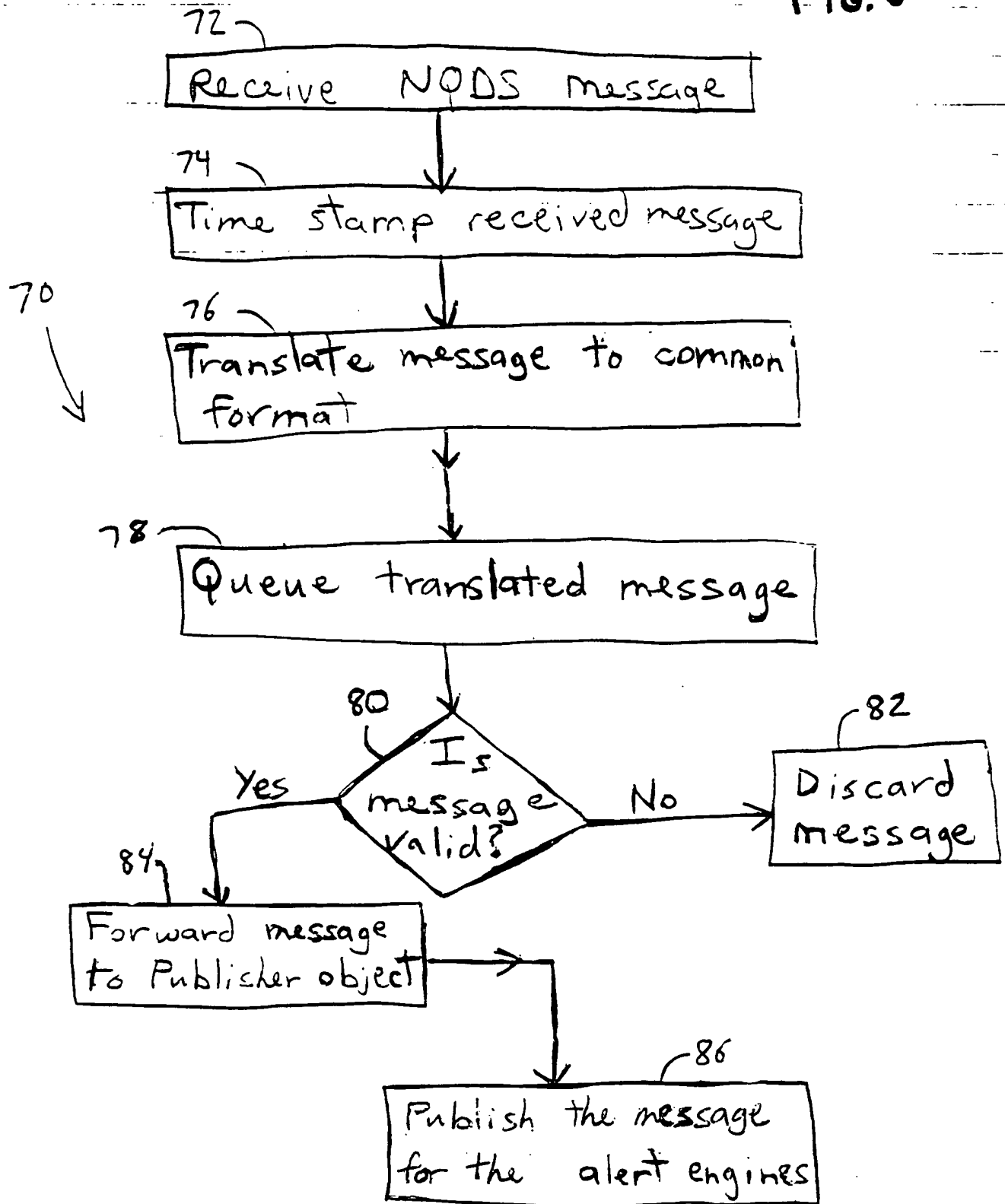


FIG. 6



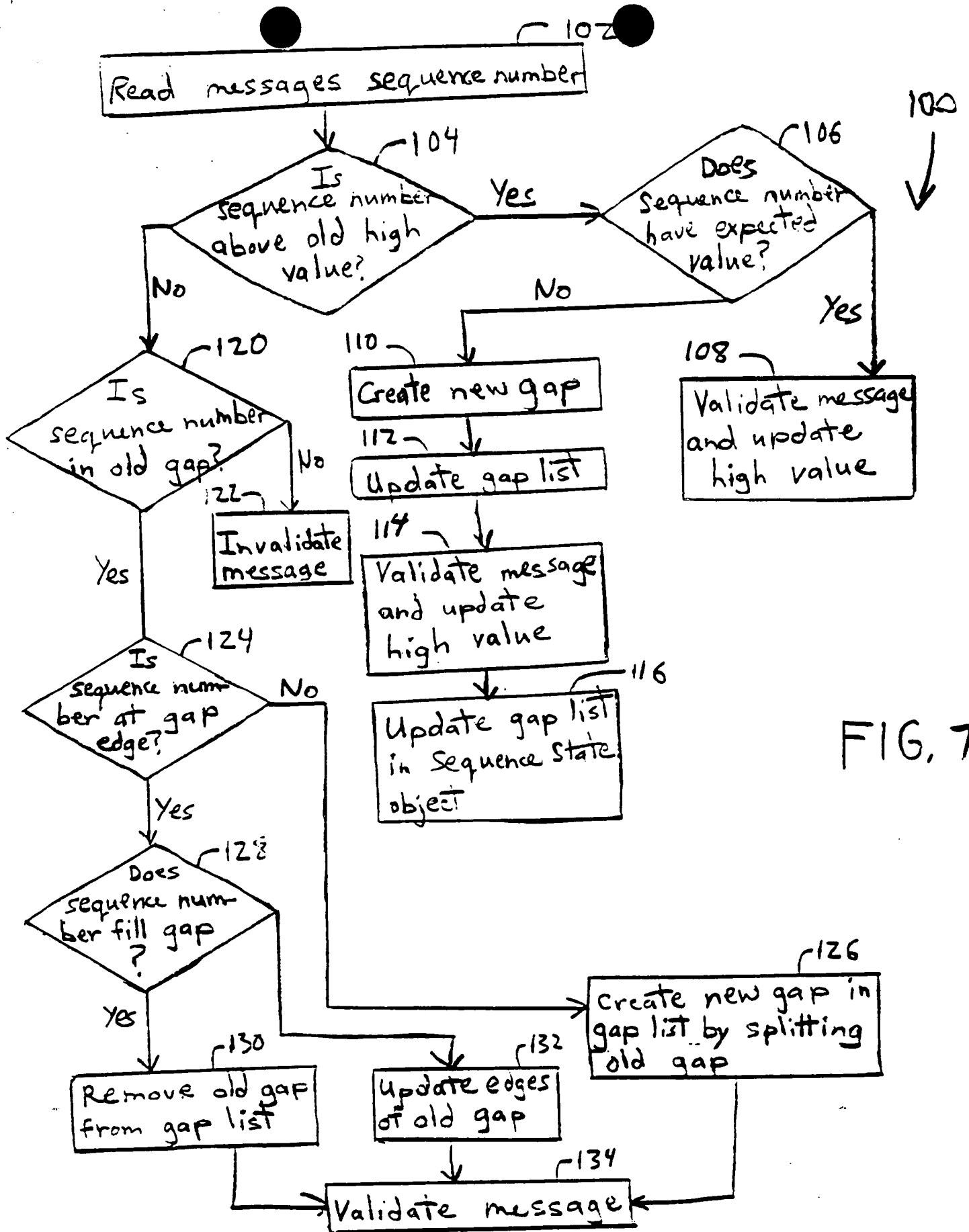


FIG. 7

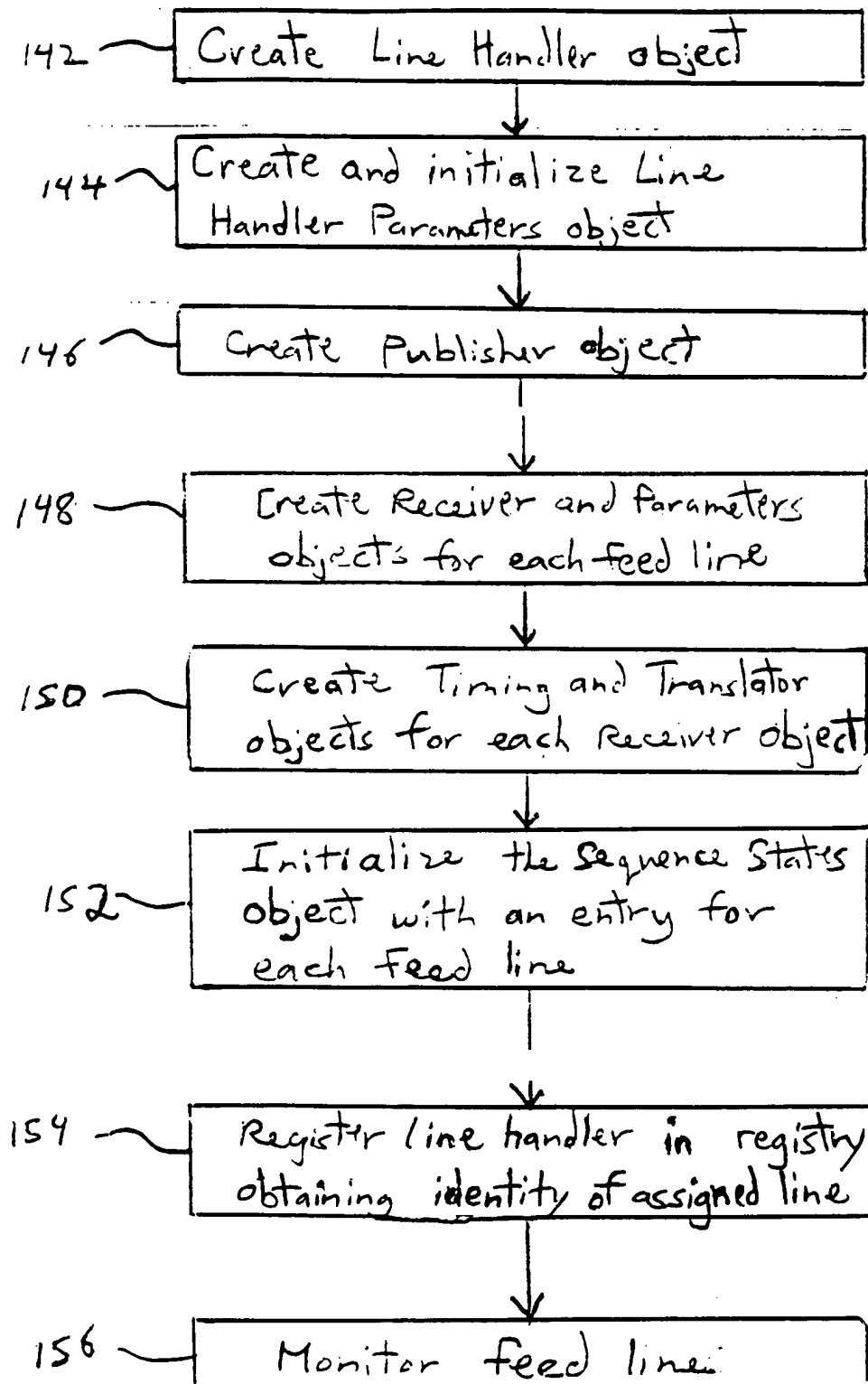


FIG. 8

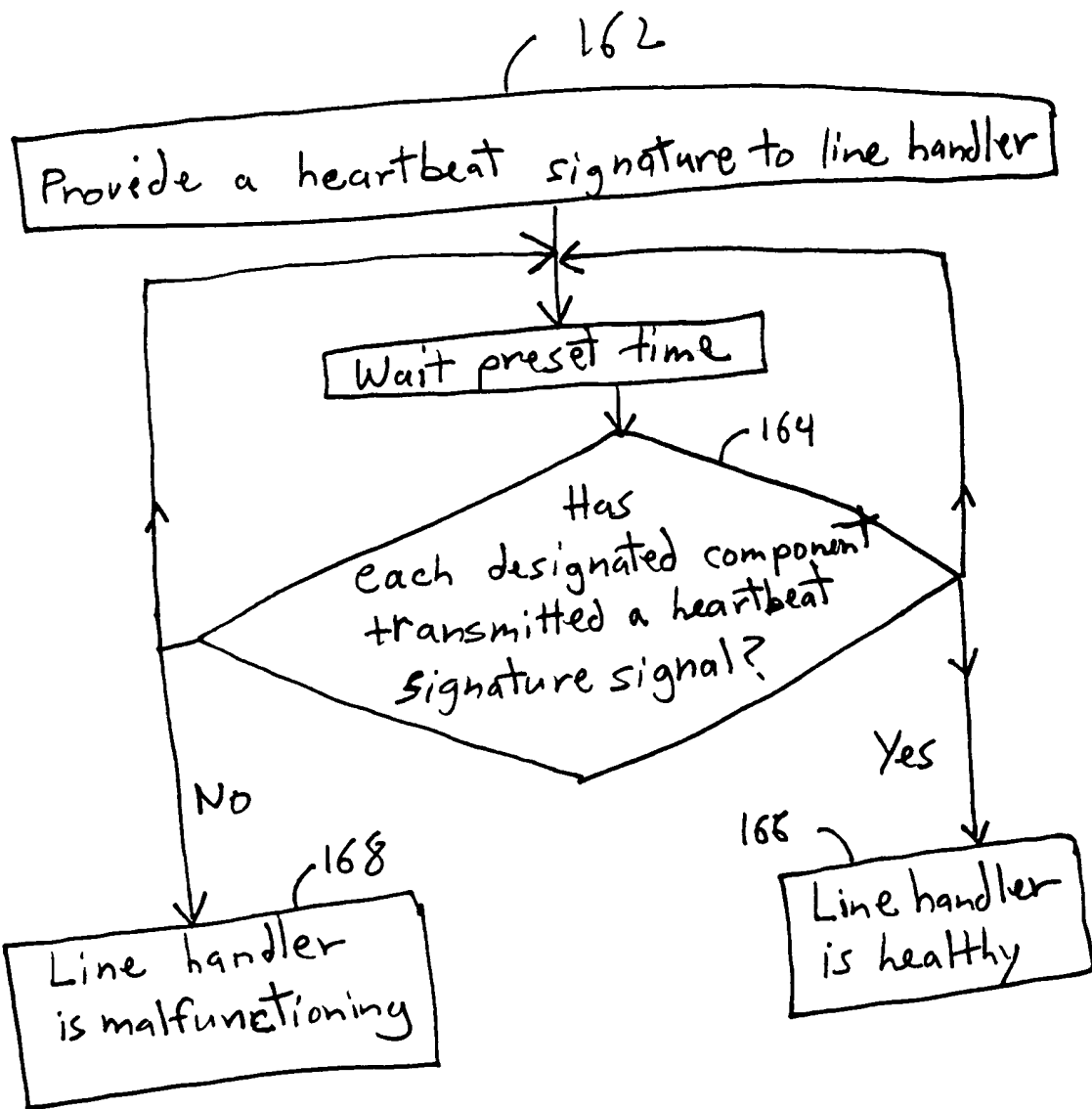


FIG. 9

166

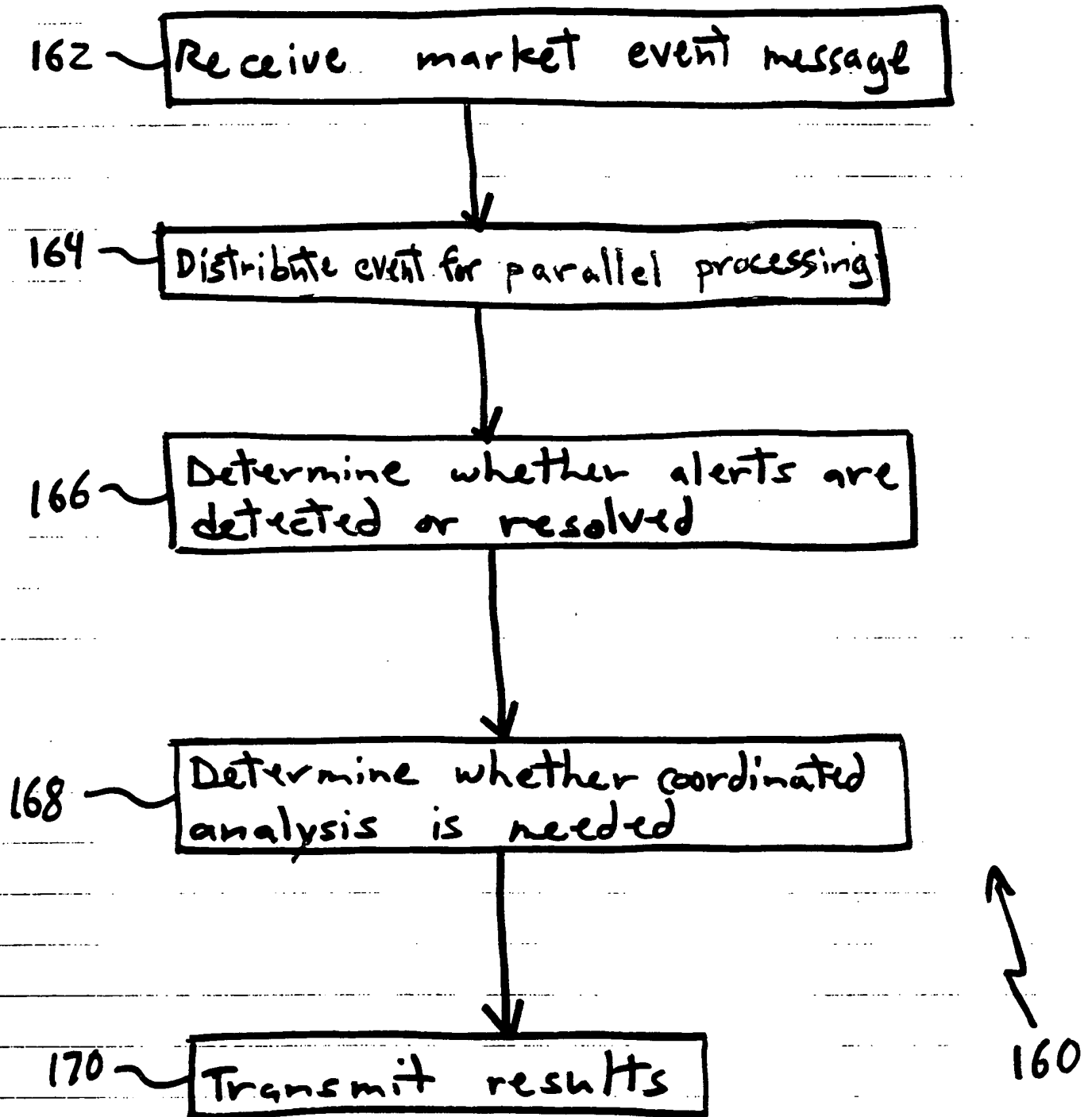
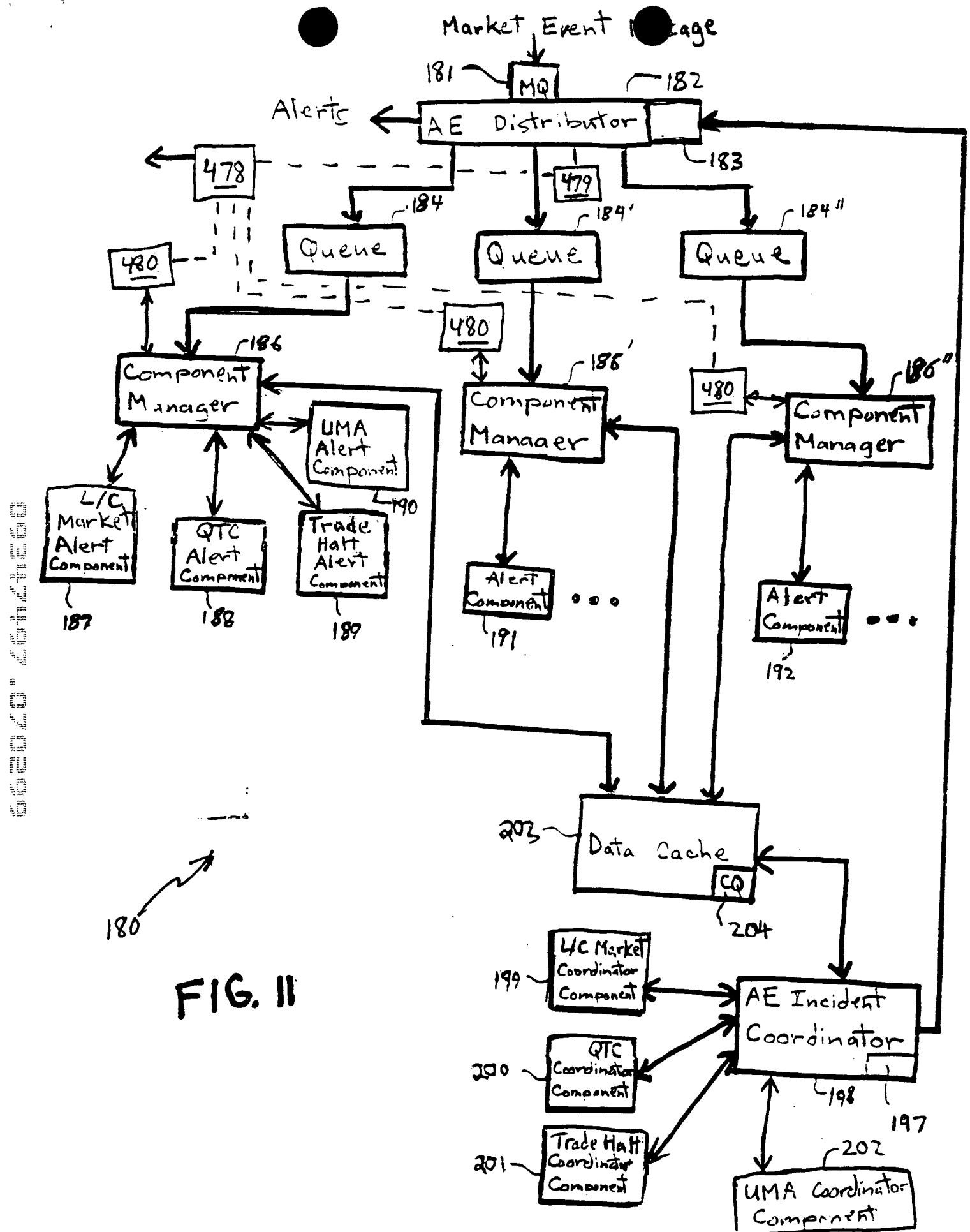


FIG. 10



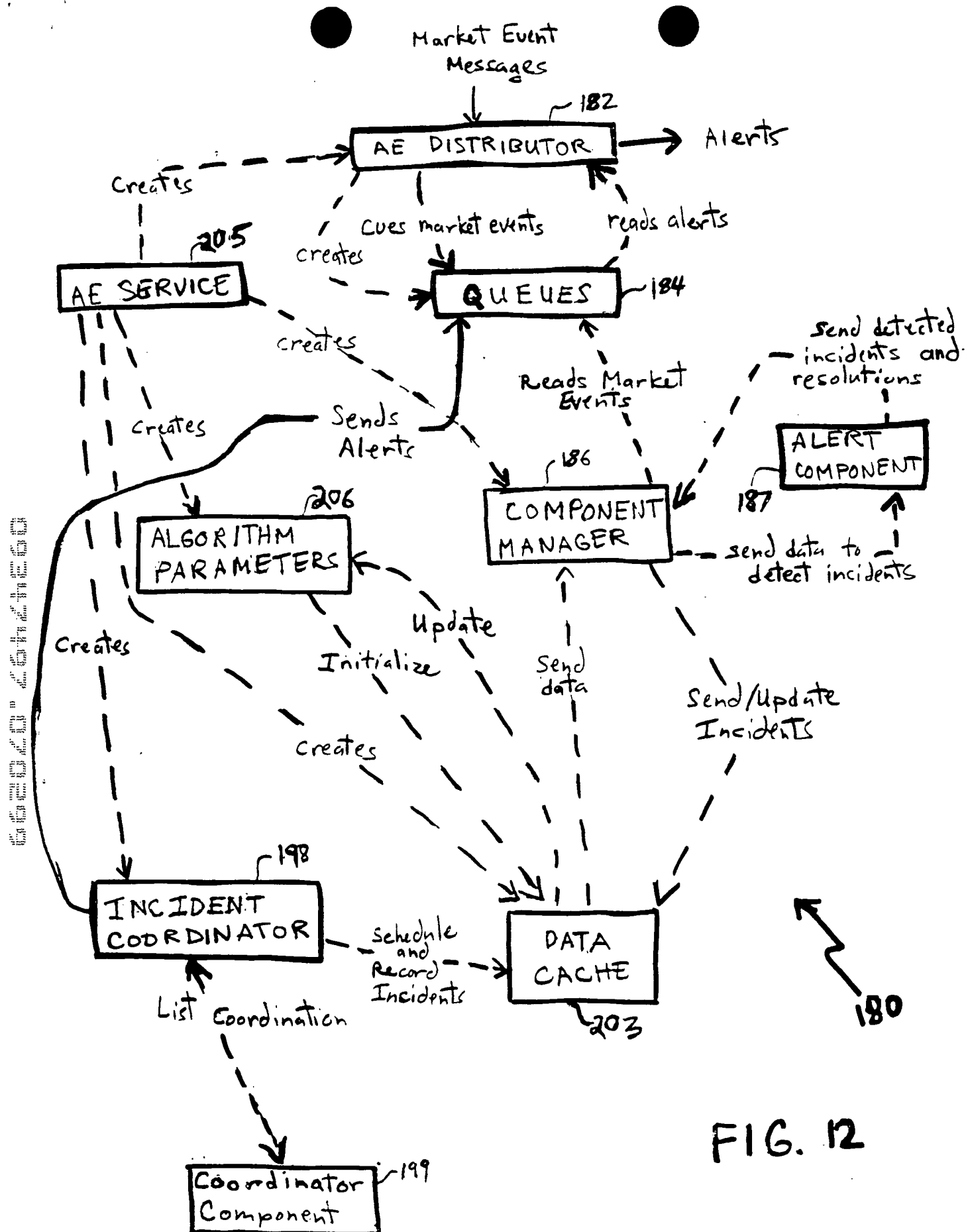
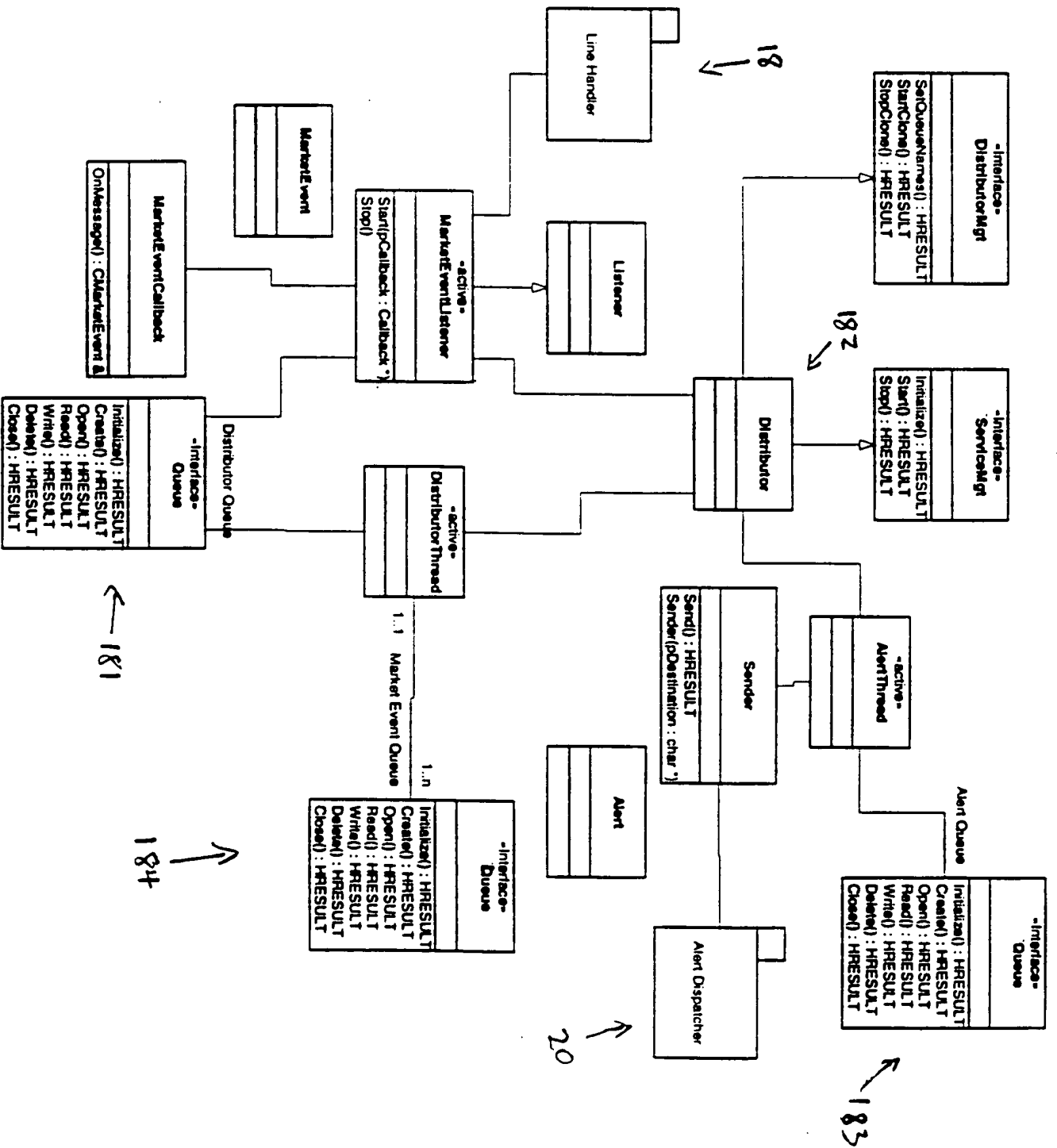
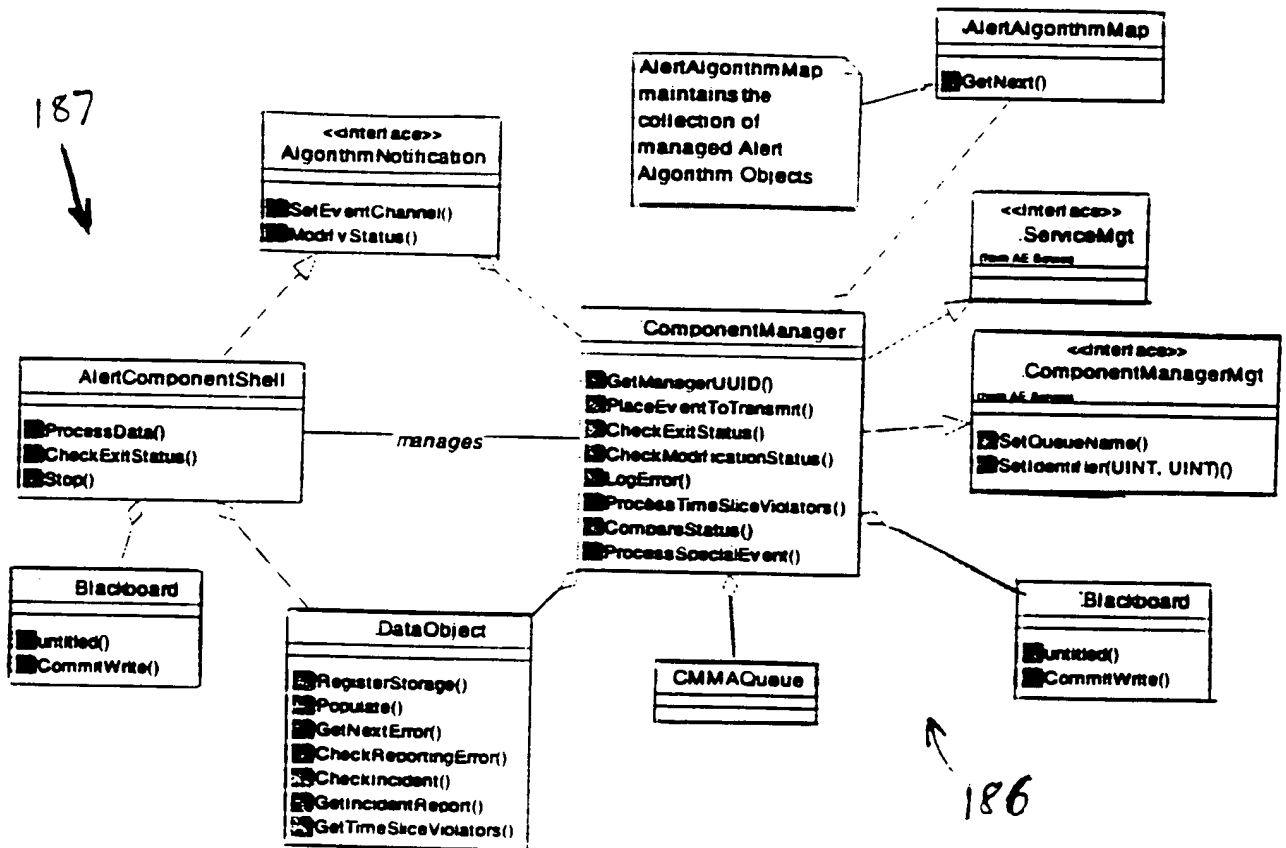


FIG. 13A



03347493 a 03347493

FIG. 13B



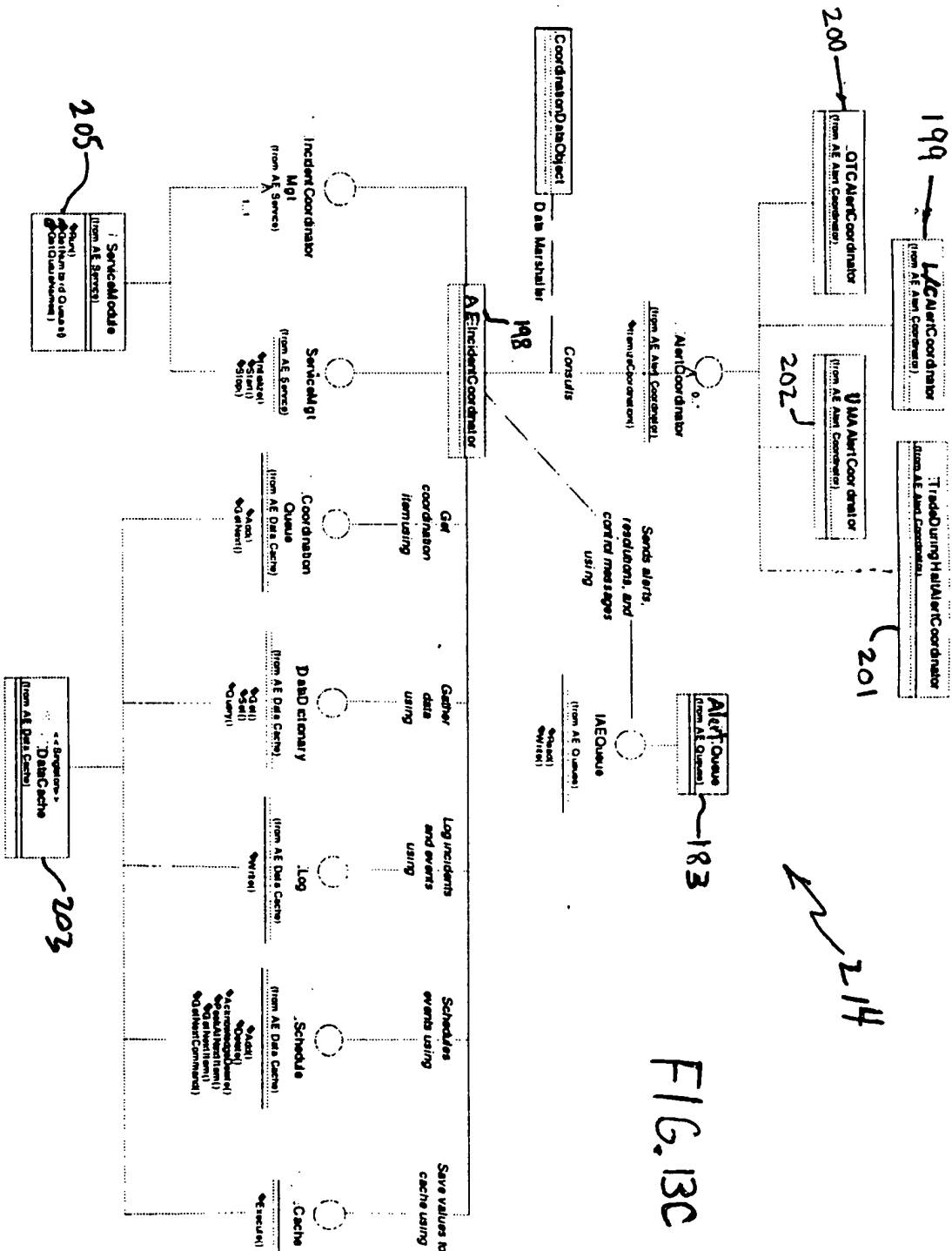
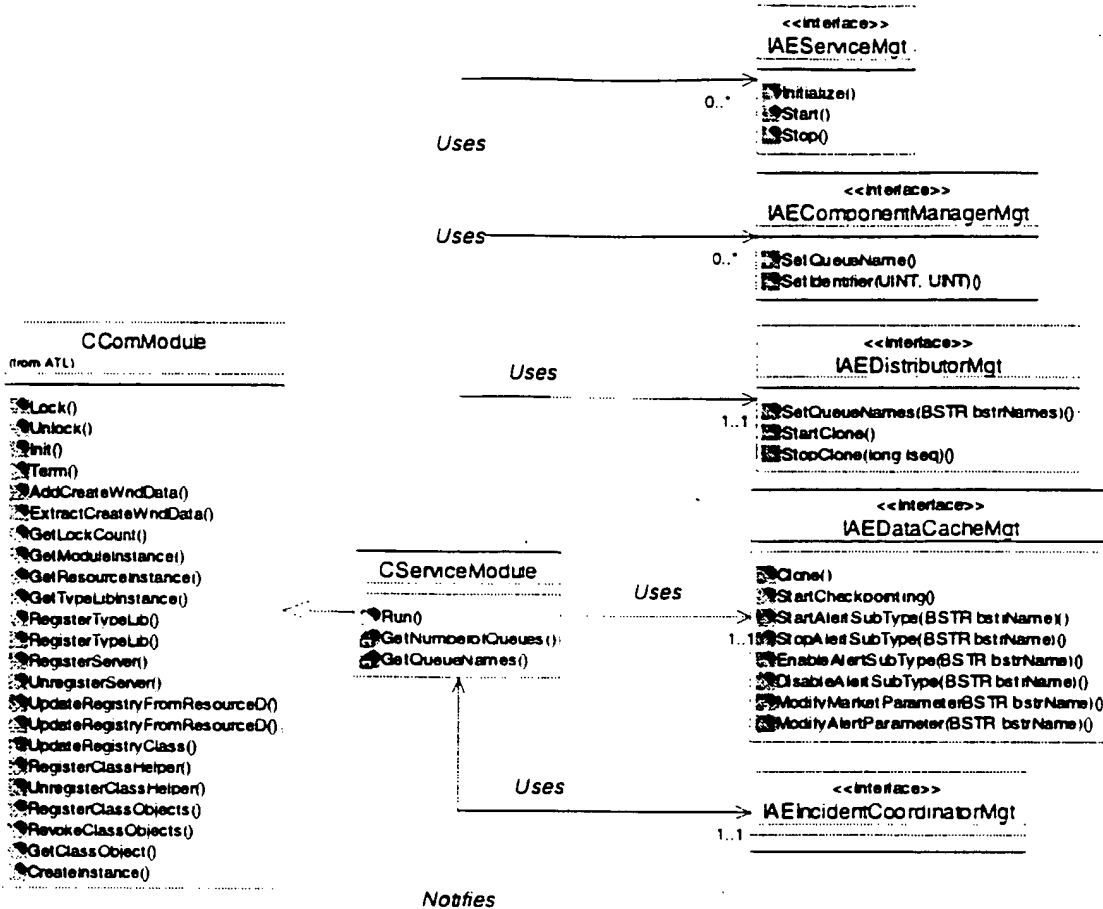


FIG. 13C

216



204

38

CAEApplicationManager
(from AE Algorithm Parameter)

+Implements

```

<<interface>>
IAEAppicationAdm
(from AE Algorithm Parameter)

GetValue(ID : DWORD, varValue : VARIANT*) : return
SetValue(nID : DWORD, varValue : VARIANT*) : BOOL
GetParameterTable(bstrAlgoName : BSTR, bstrTable : BSTR*) : BOOL
GetAlgorithmTable(bstrAlgorithmTable : BSTR*) : BOOL
Start(argname) : return
Stop(argname) : return
Clone(argname) : return
Checkpoint(argname) : return
  
```

CComObjectRootEx<class CComSingleThreadModel>
(from ATL)

```

T, piid,
piibid, w
DispatchImpl
(from ATL)

DispatchImpl()
-DispatchImpl()
SGGetT()
GetTypeInfo()
GetIDsOfNames()
Invoke()
GetTypeInfoCount()
  
```

```

T, piid
CComCoClass
(from ATL)

SGGetObjectDescription()
SGGetObjectCLSID()
SGetError()
SGetError()
SGetError()
SGetError()
SGetError()
SGetError()
  
```

FIG. 13D

242 Receive market event message from line handler

240 ⚡
244 Determine issue and sequence number of received message

246 Is new number duplicate of old highest number?
Yes → 248 Discard

FIG. 14

250 Is message next expected message?
Yes → 252 Distribute message to queue for the message issue

No
254 Is message higher than expected message?
Yes → 256 Distribute message and data on new gap to queue

258 Is message in old gap?
Yes → 260 Distribute message and modification to old gap to queue → 262 Update gap list in data cache
No → 264 Message is duplicate — discard

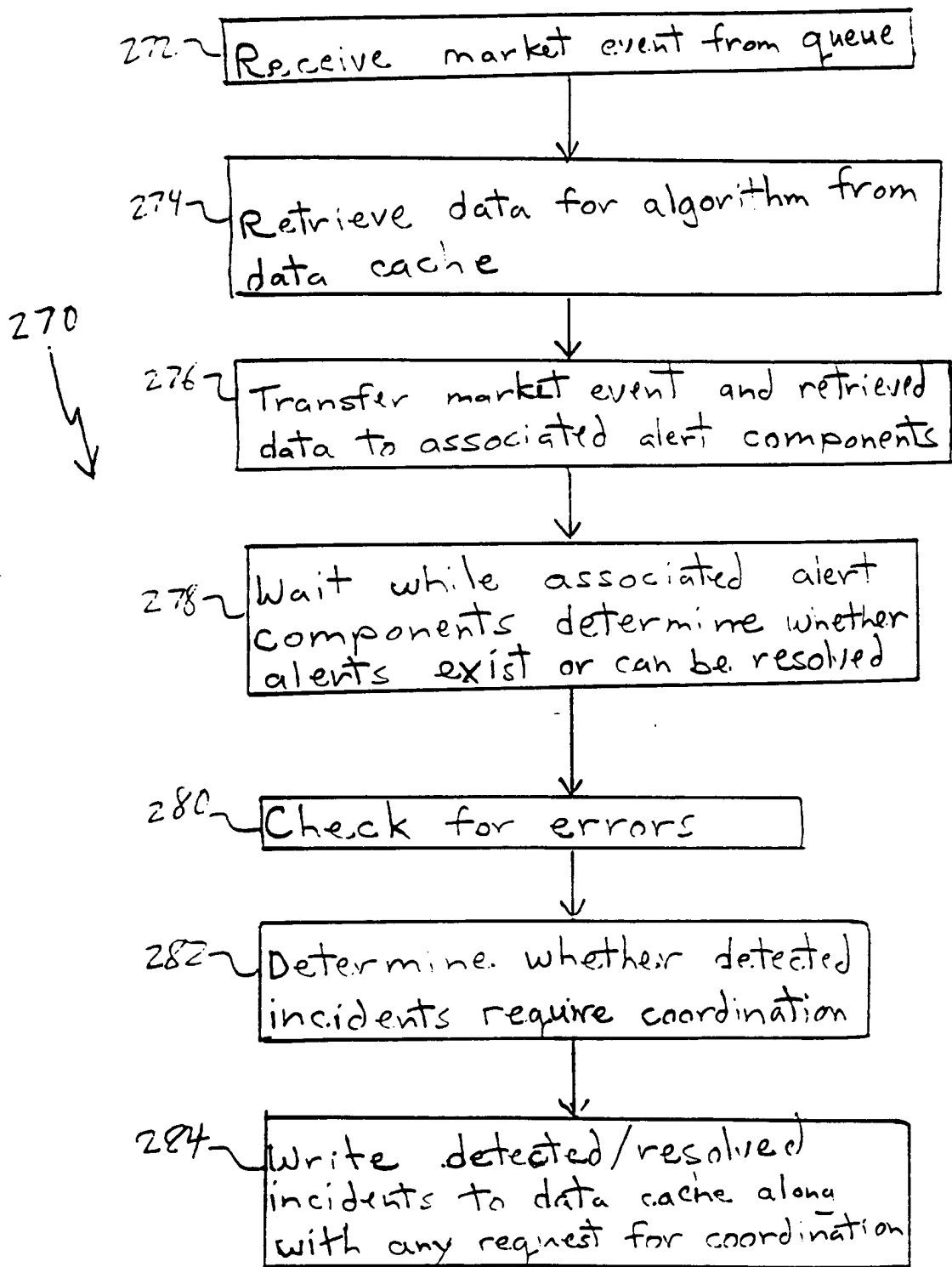


FIG. 15

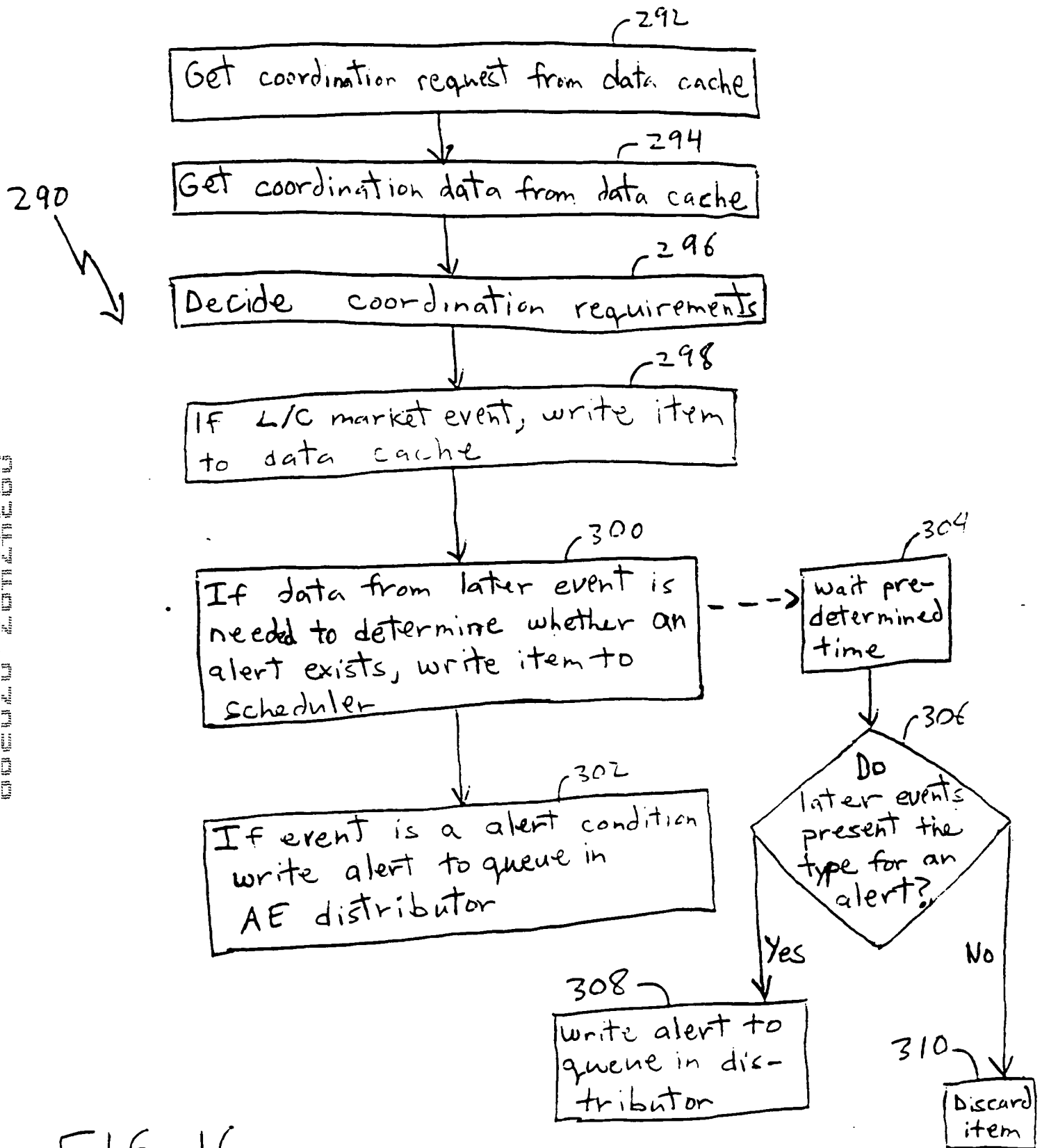
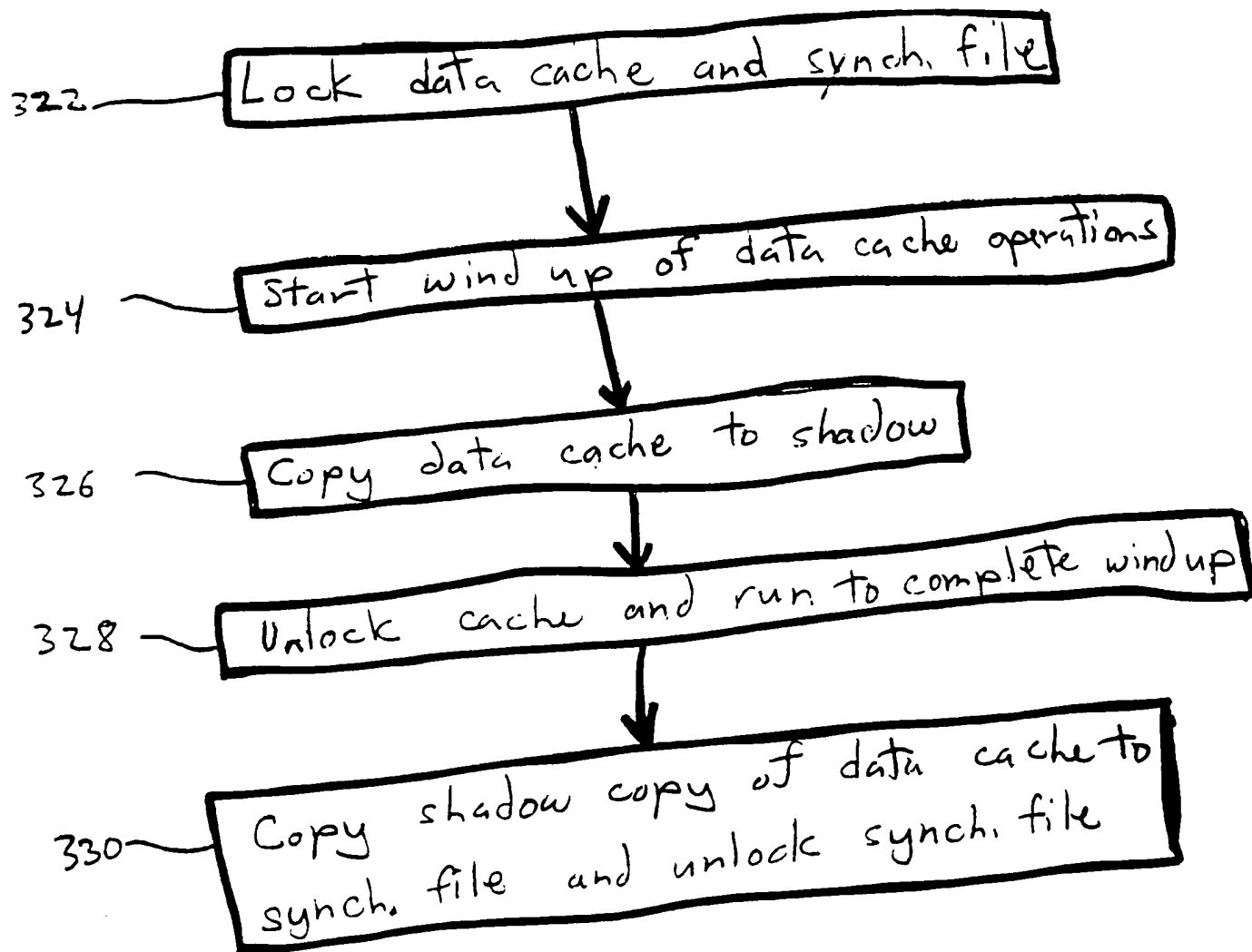


FIG. 16



320

FIG. 17A

662020" 2014/11/20

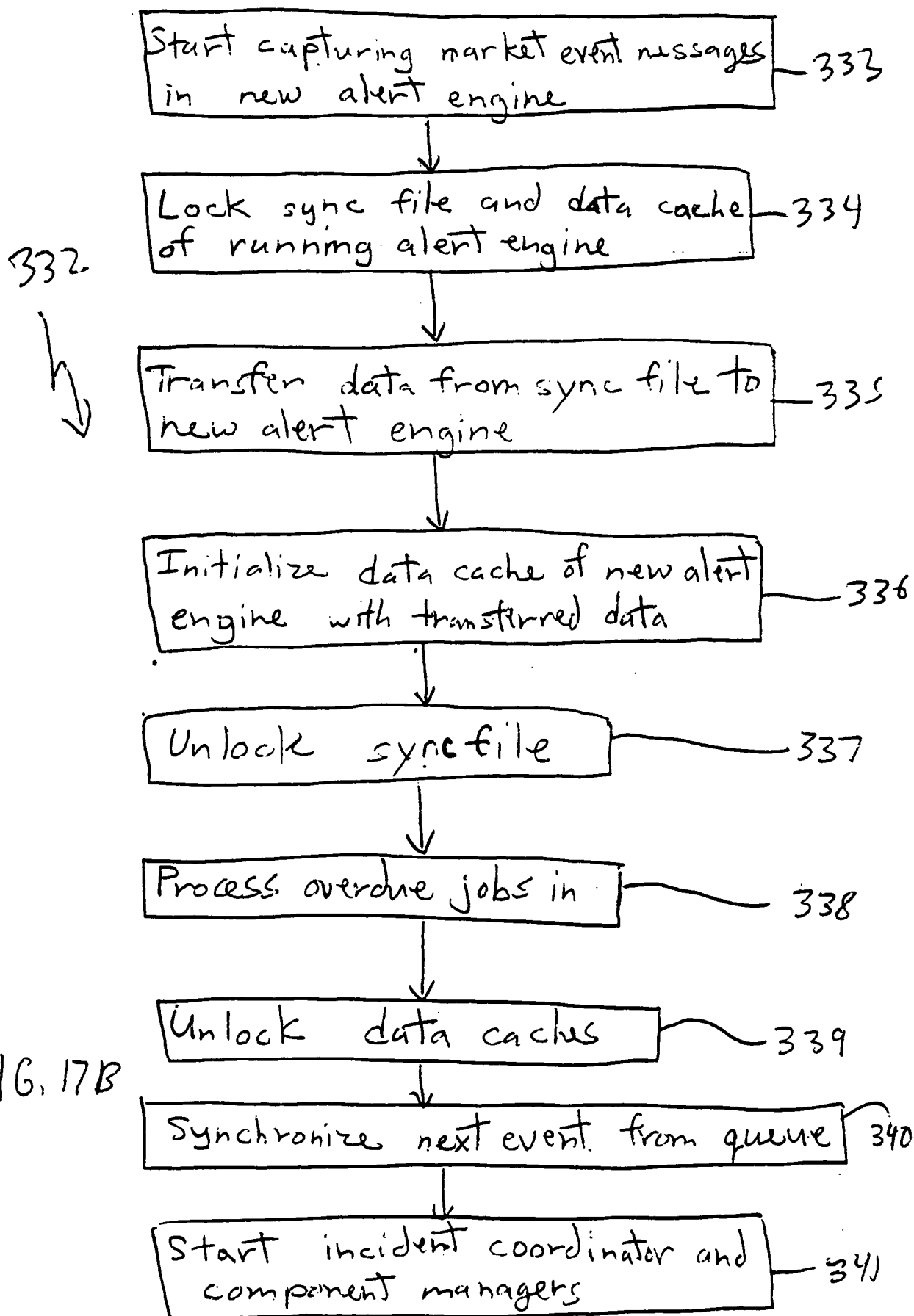


FIG. 17B

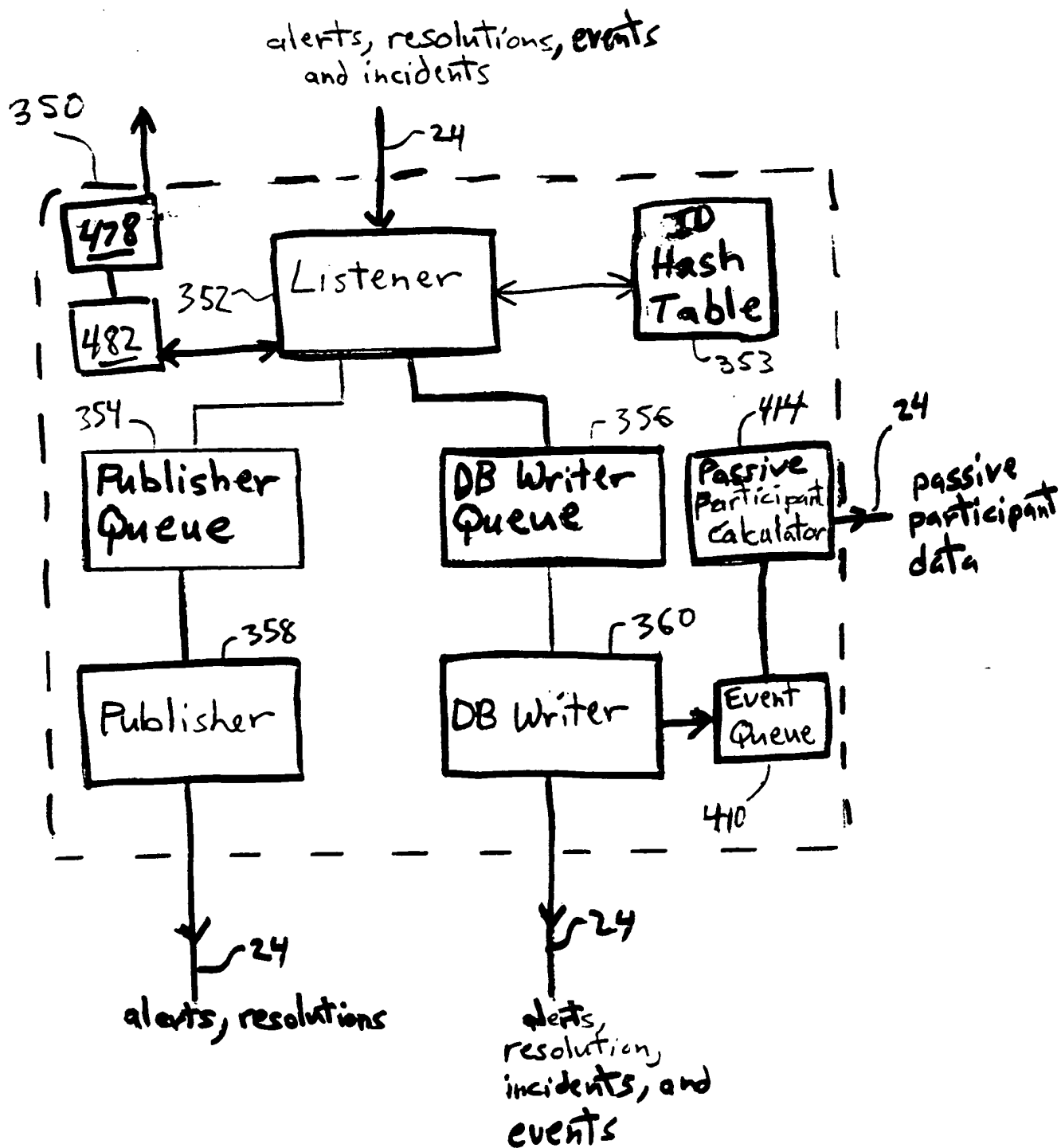


FIG. 18

FIG. 19

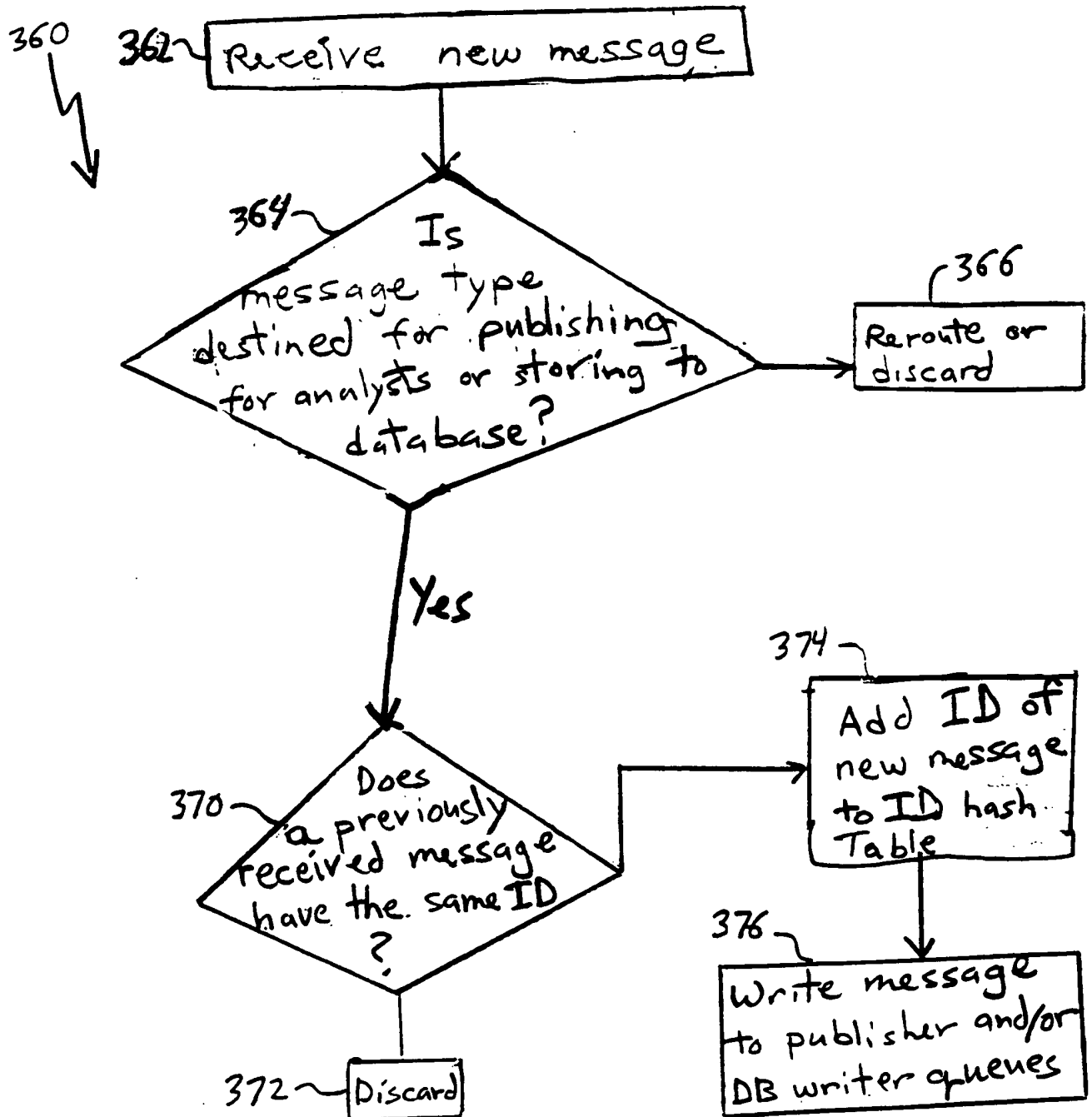
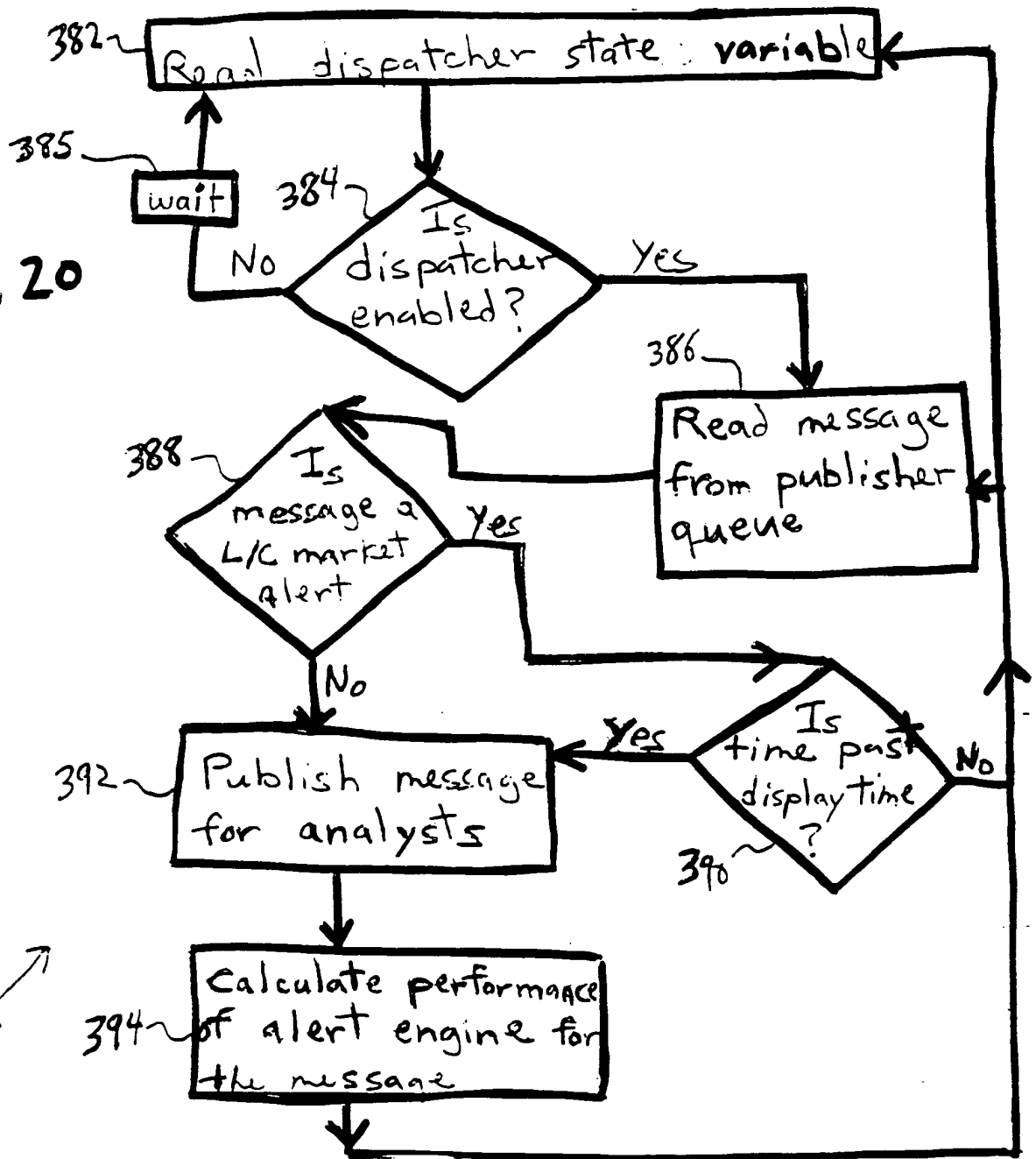


FIG. 20



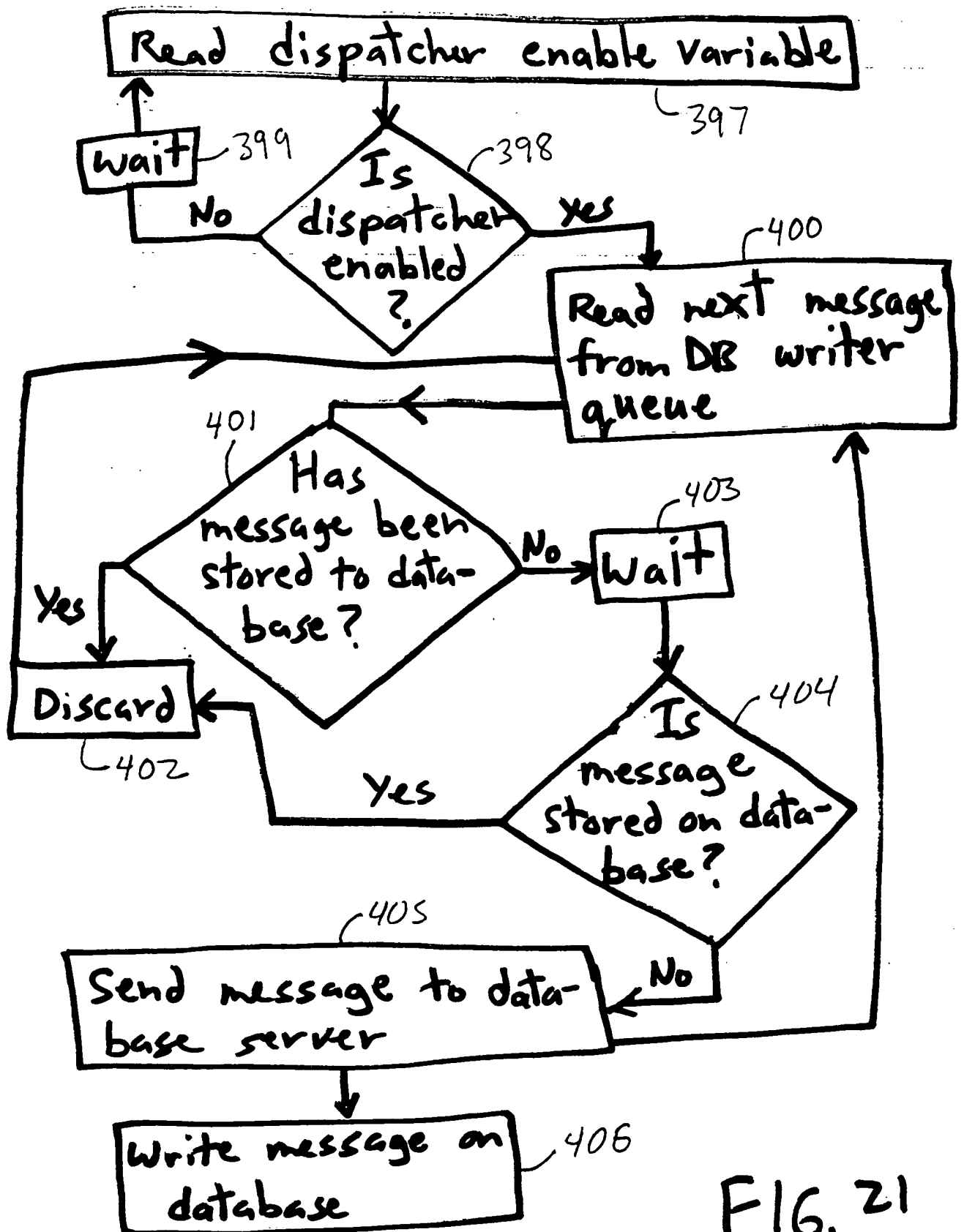


FIG. 21

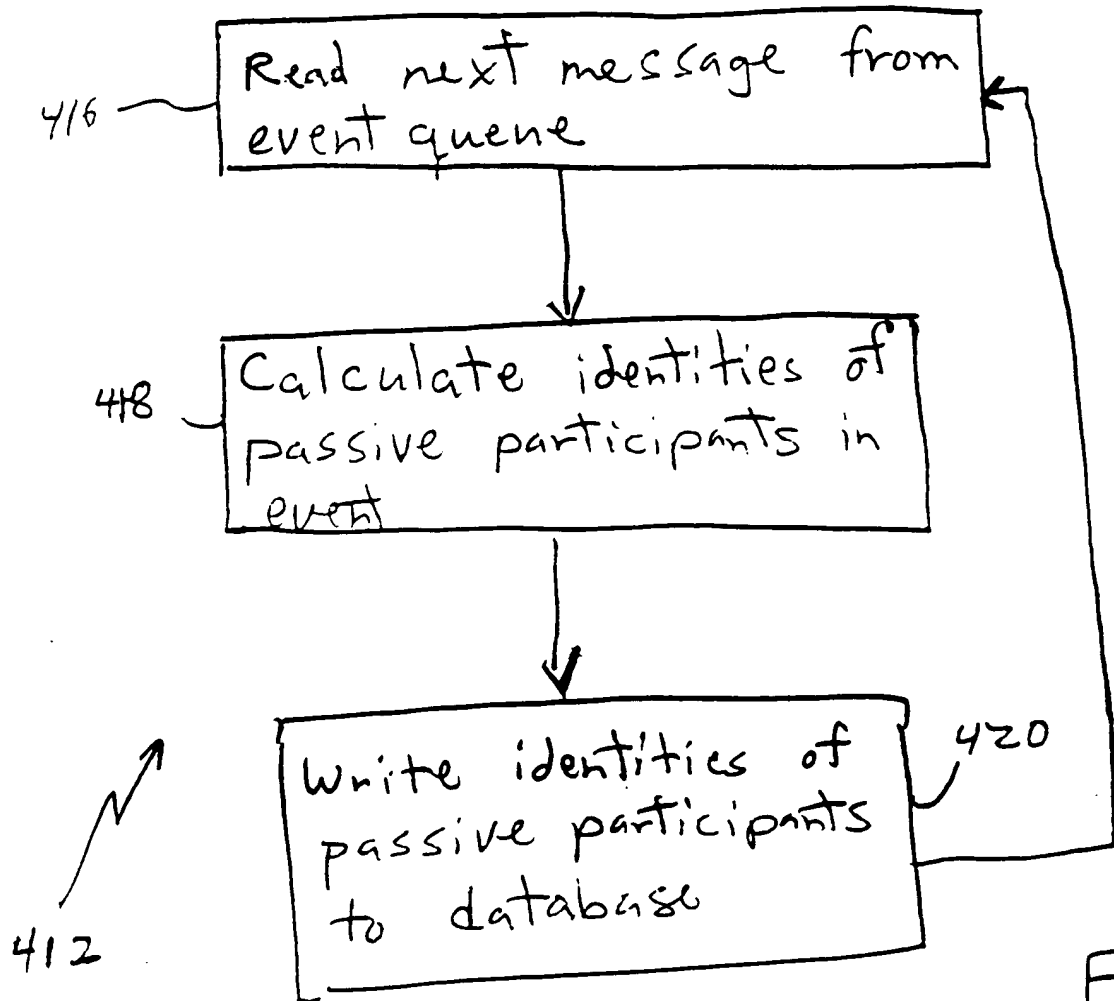
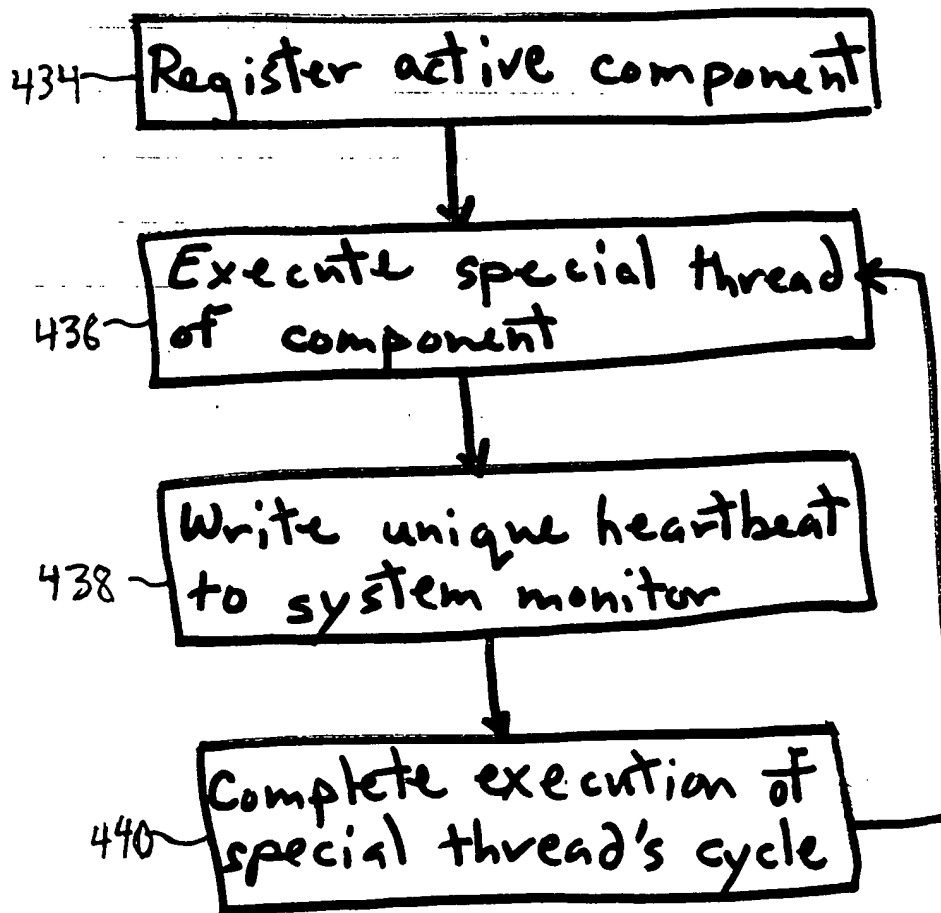


FIG. 22

[illegible]

432

FIG. 23

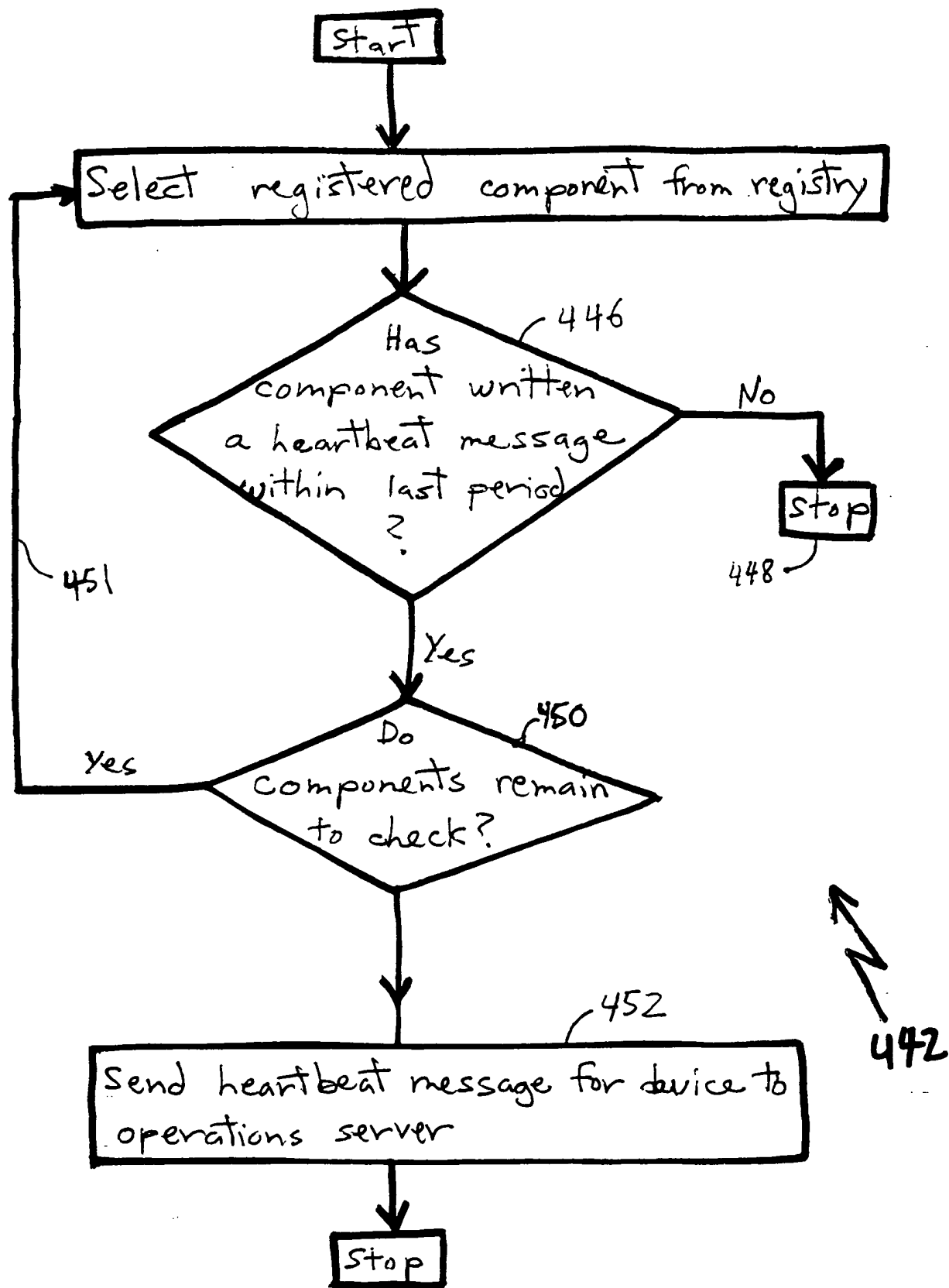


FIG. 24

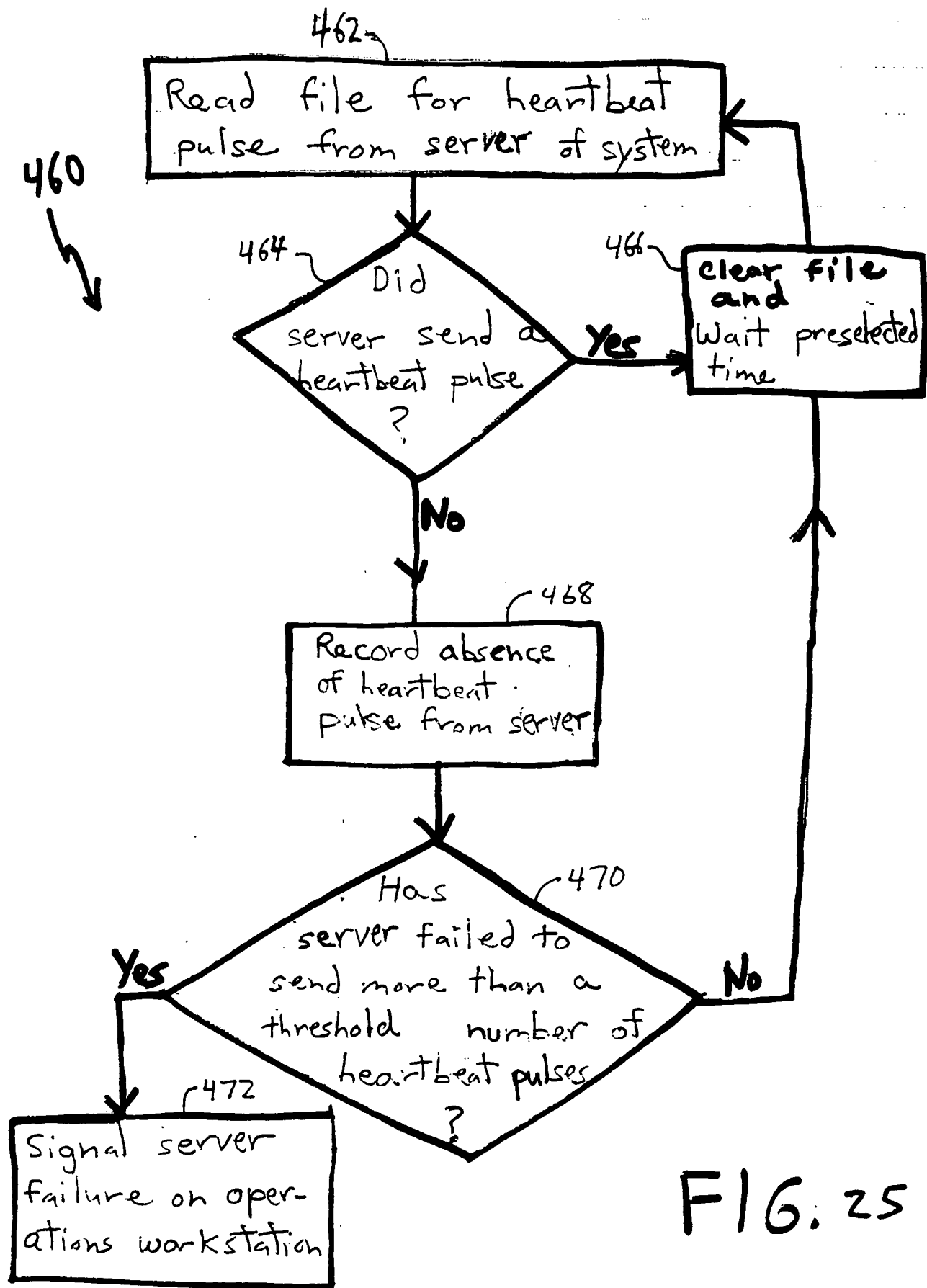
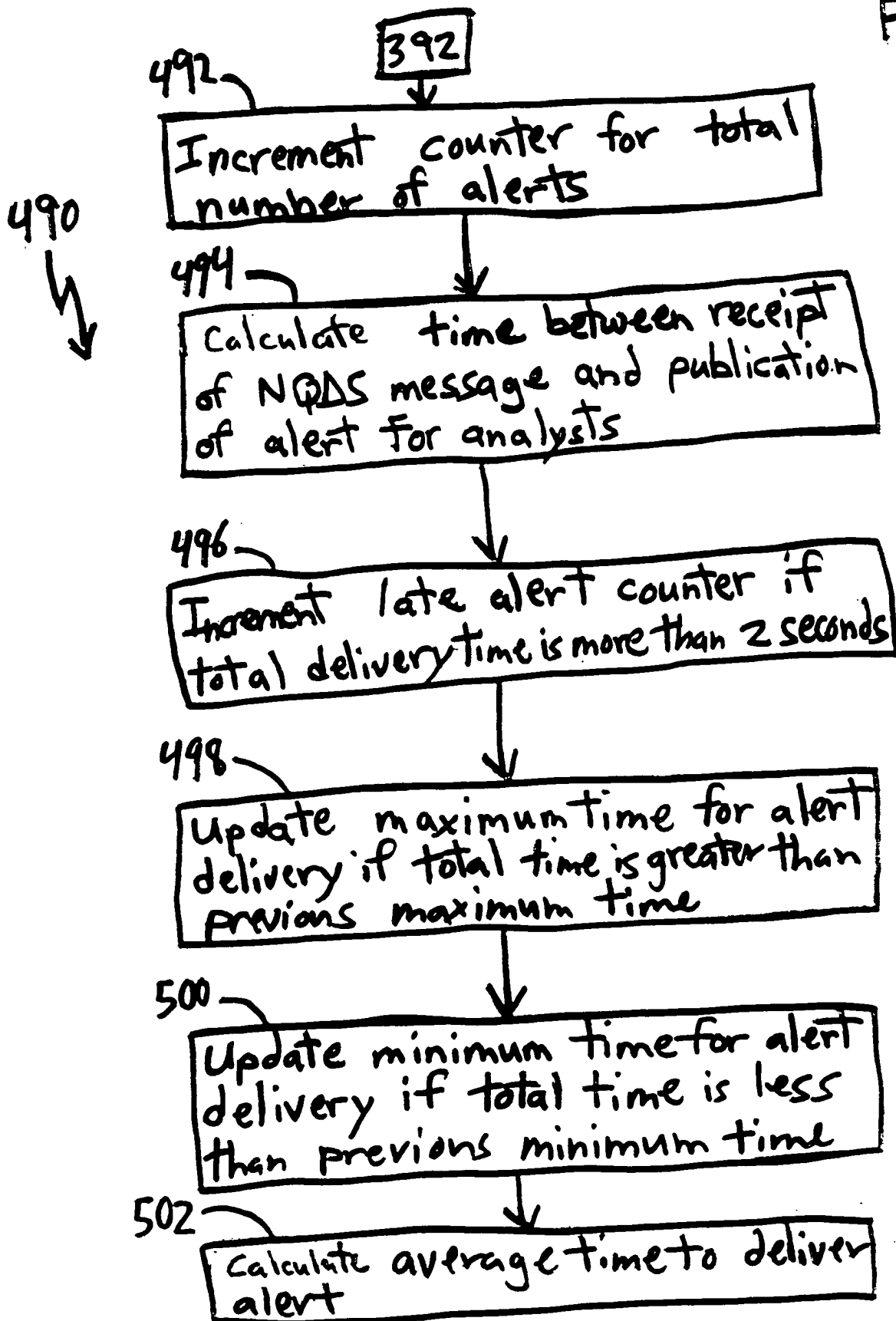


FIG. 25

FIG. 26



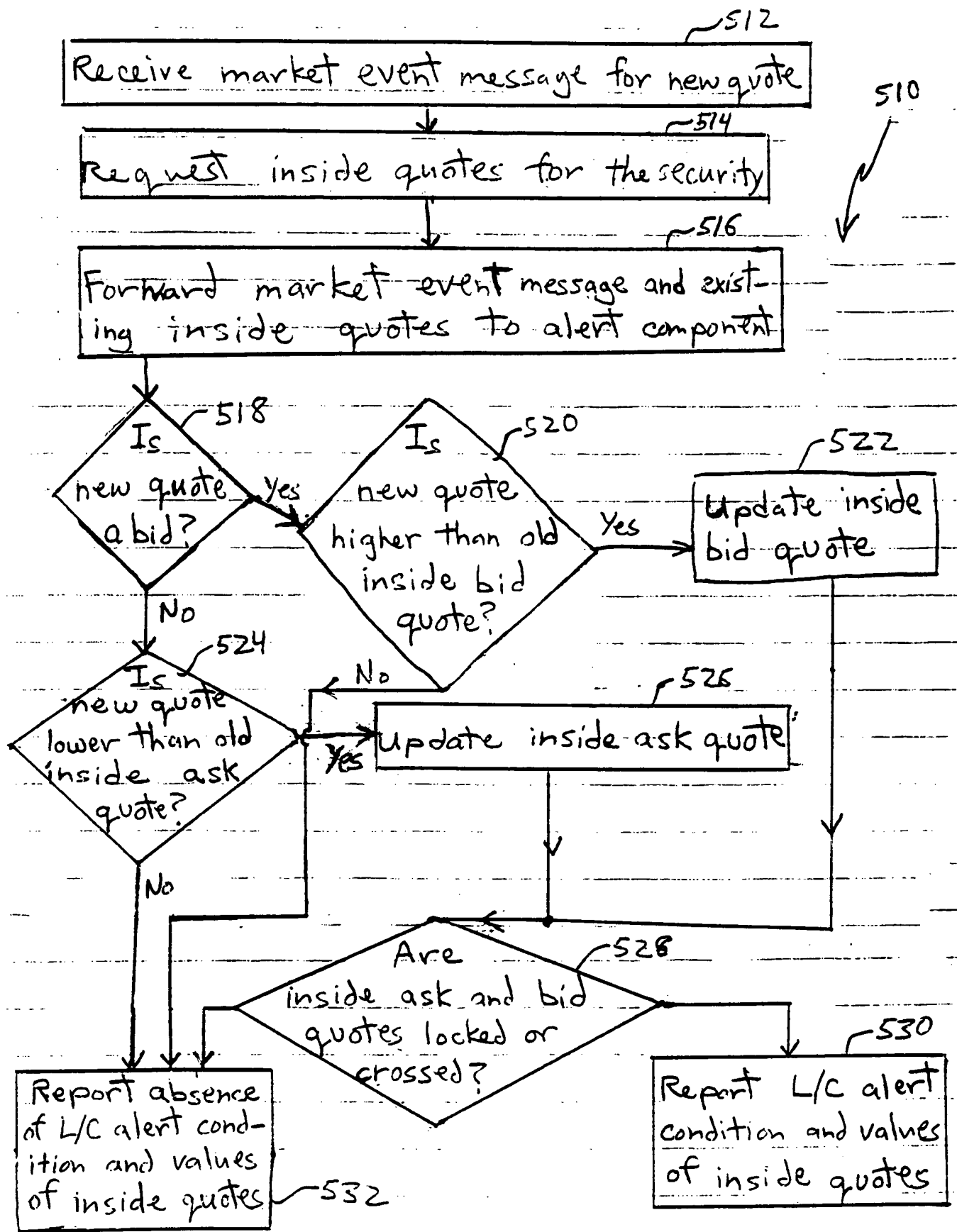


FIG. 27

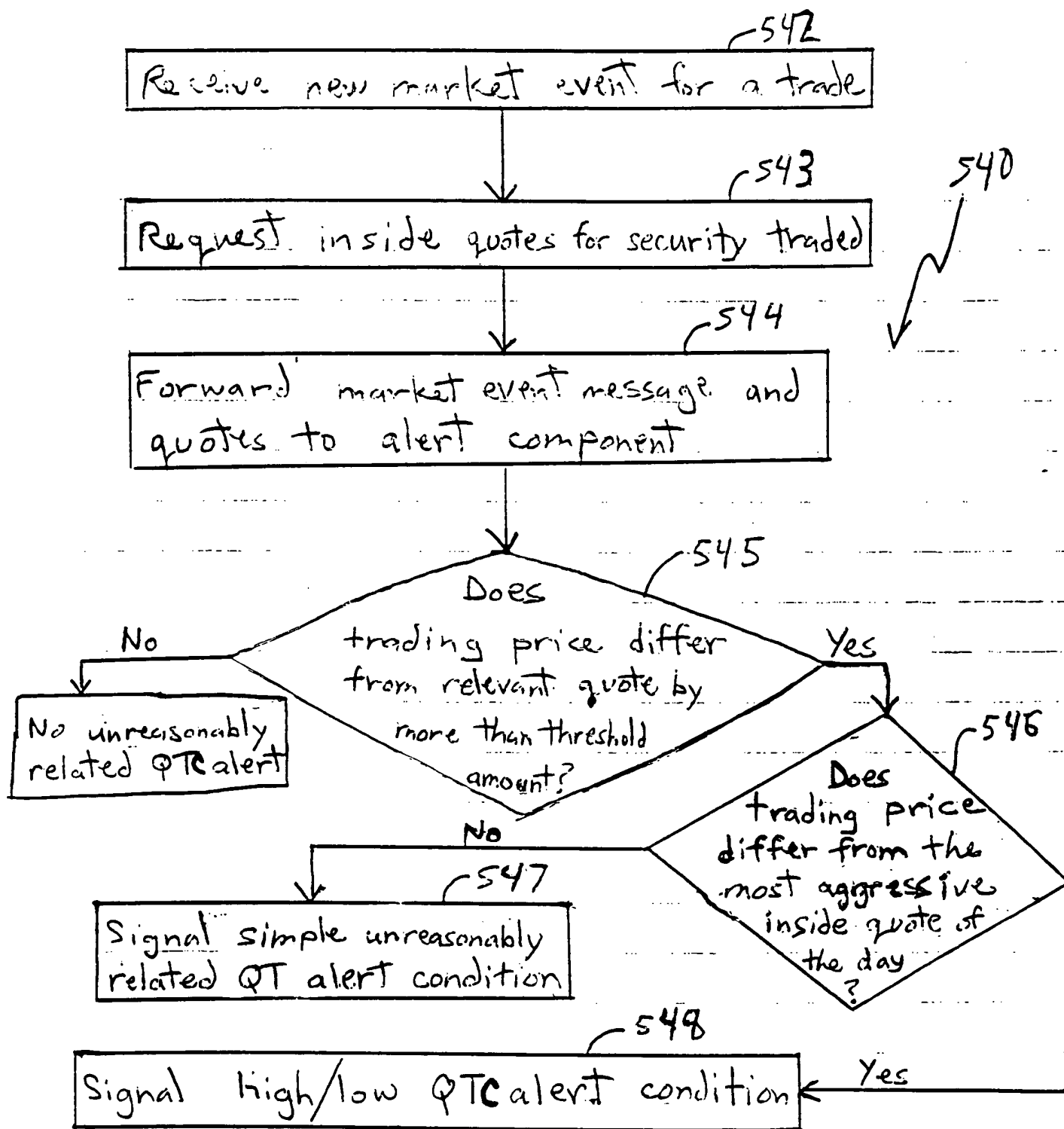


FIG. 28

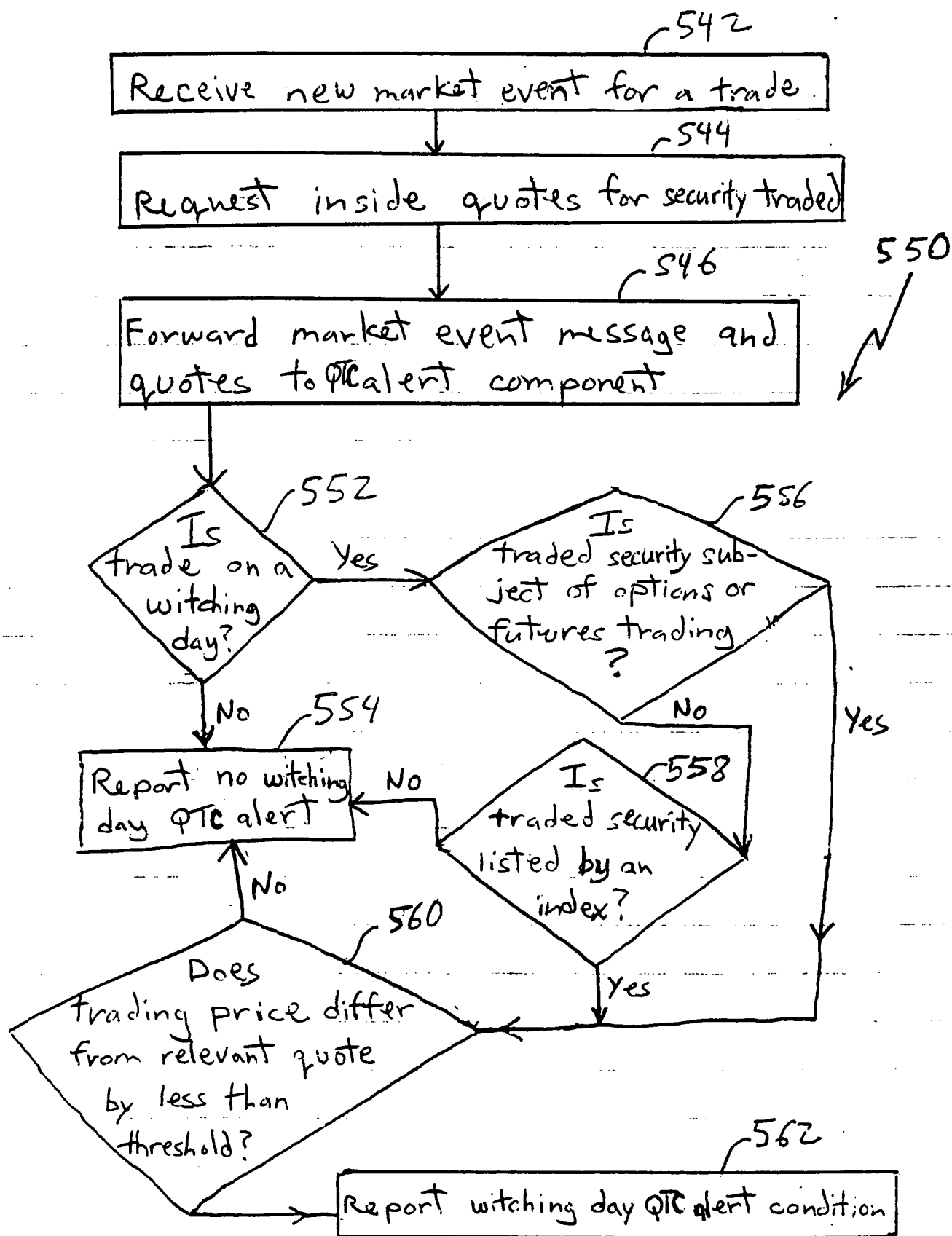


FIG. 29

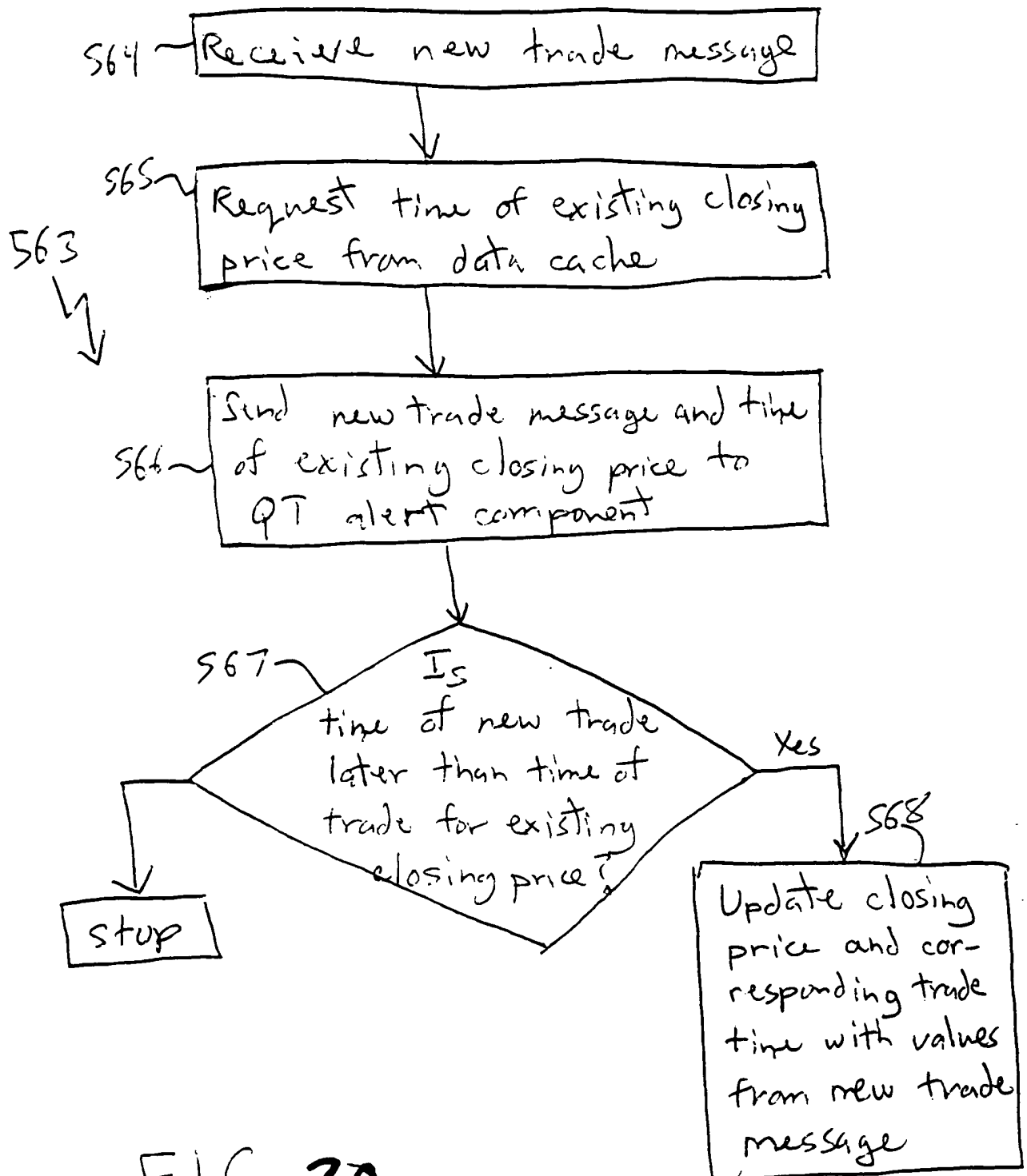


FIG. 30

569
↓

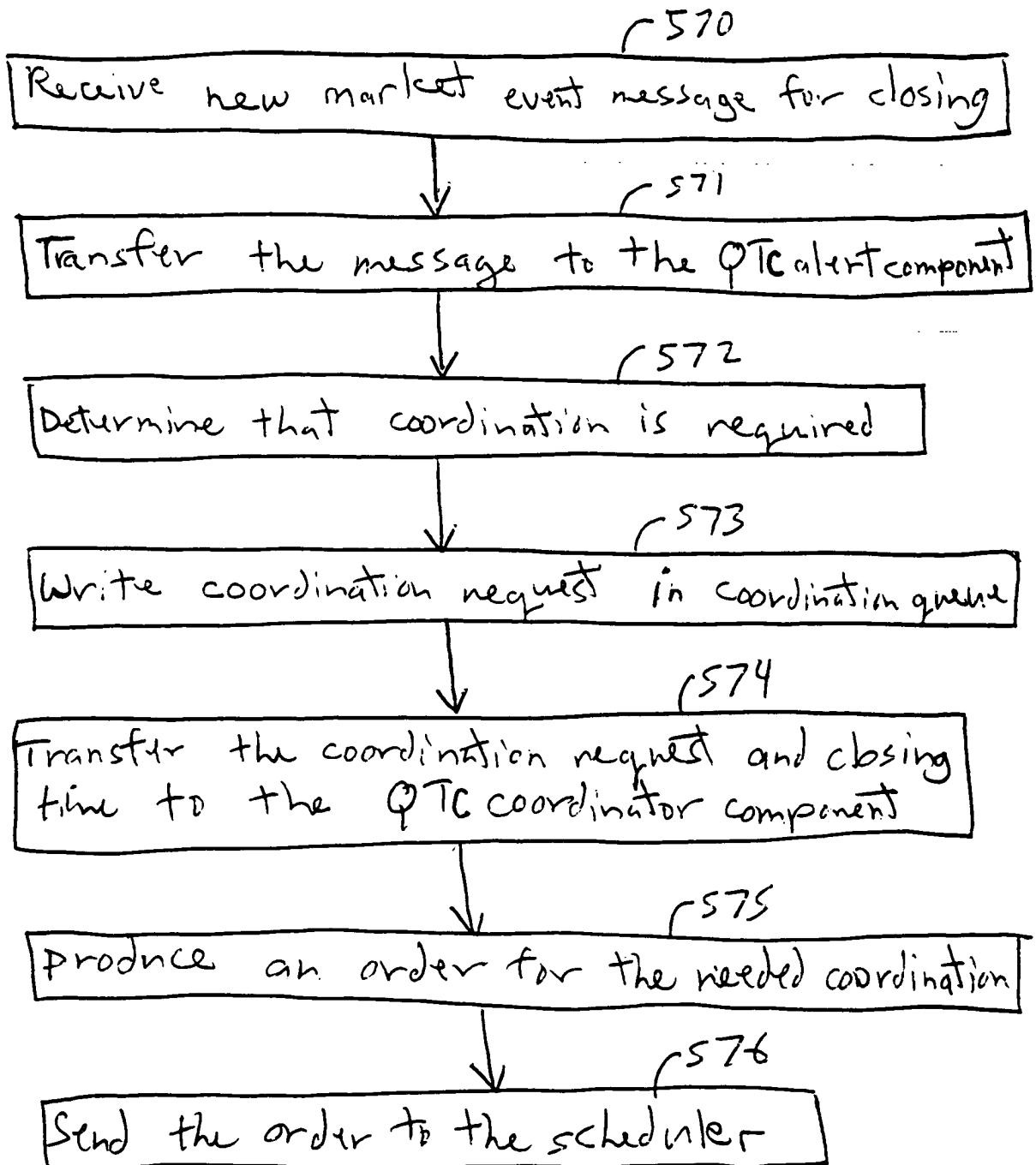


FIG. 31

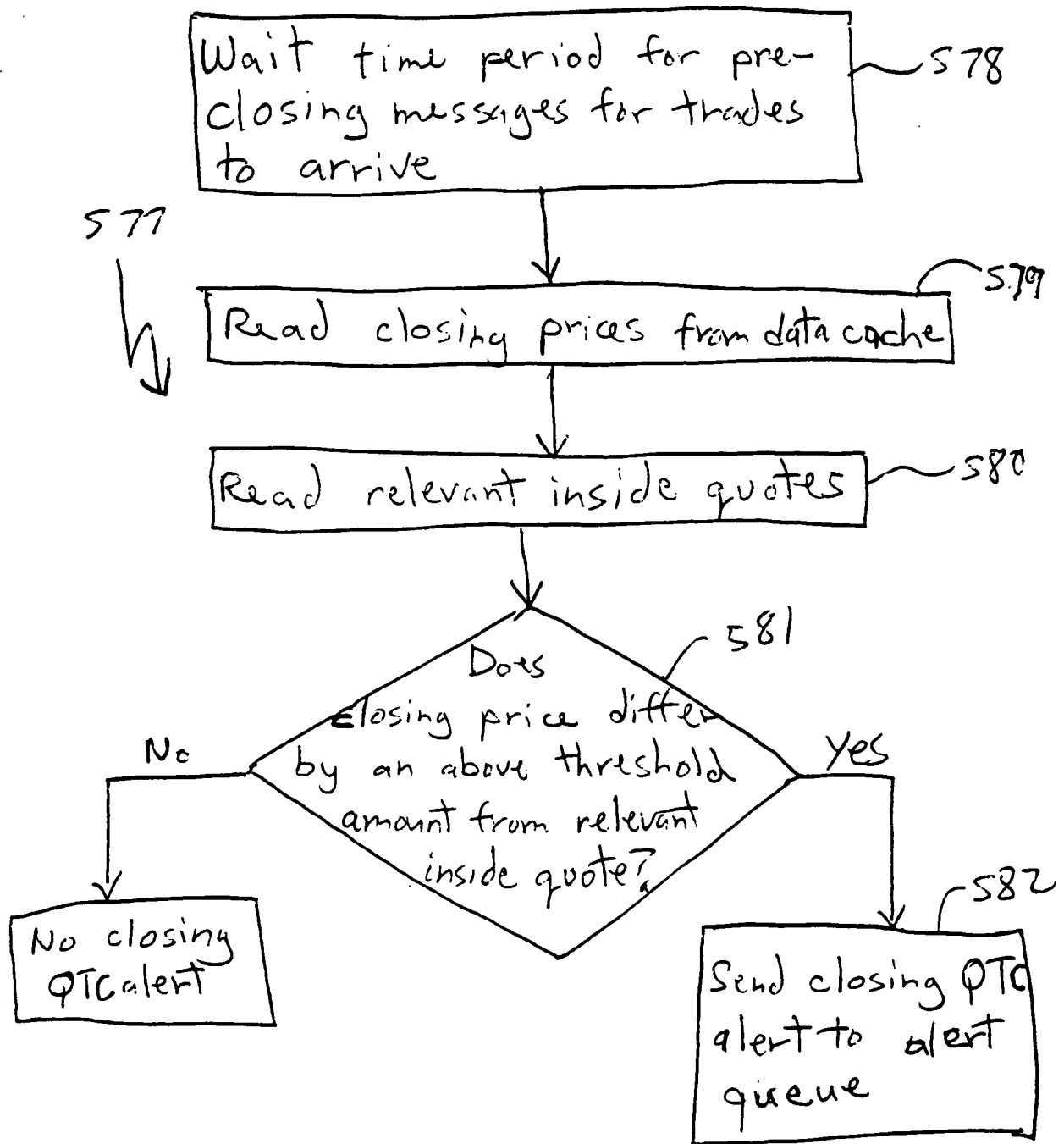
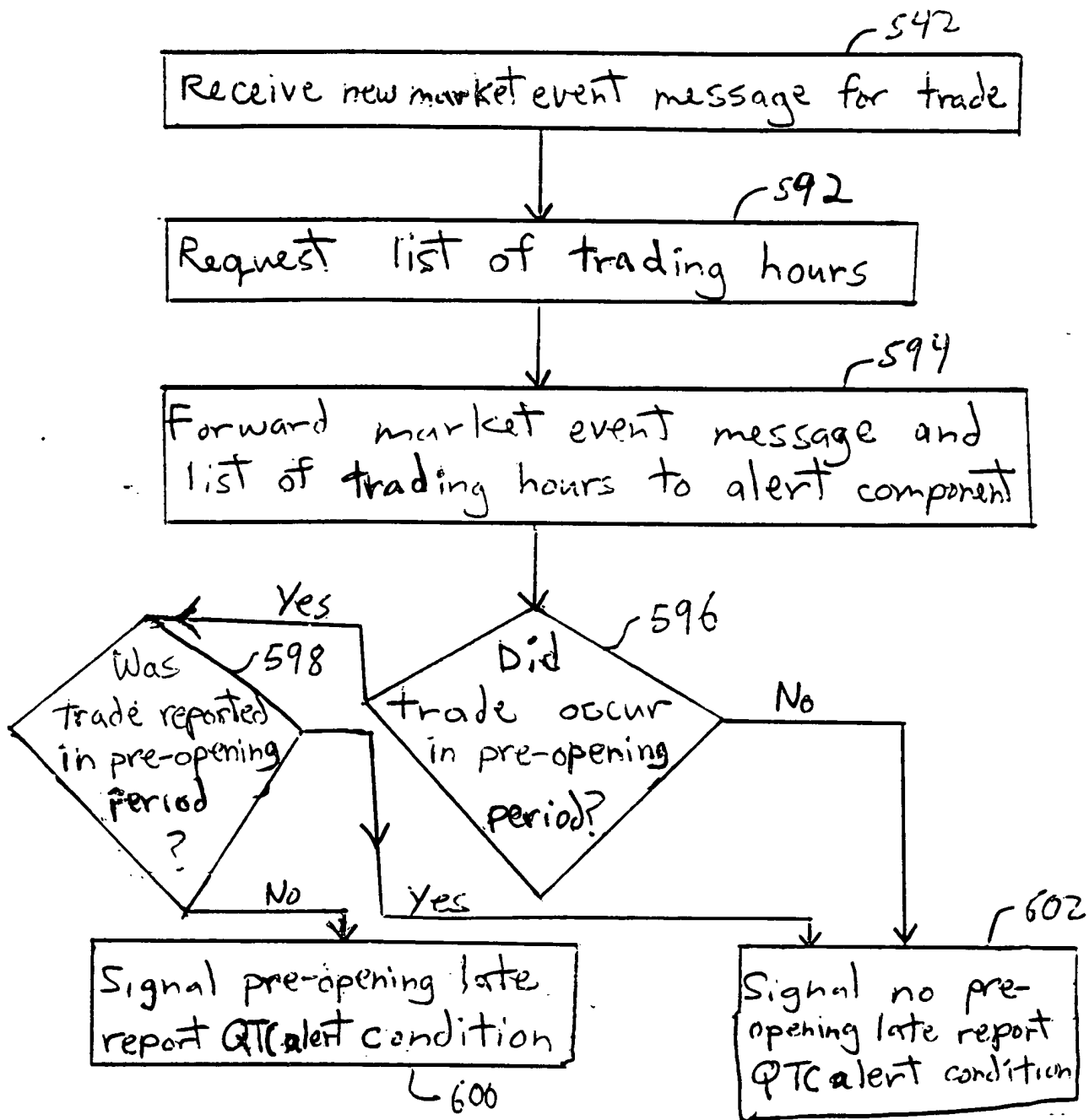


FIG. 32

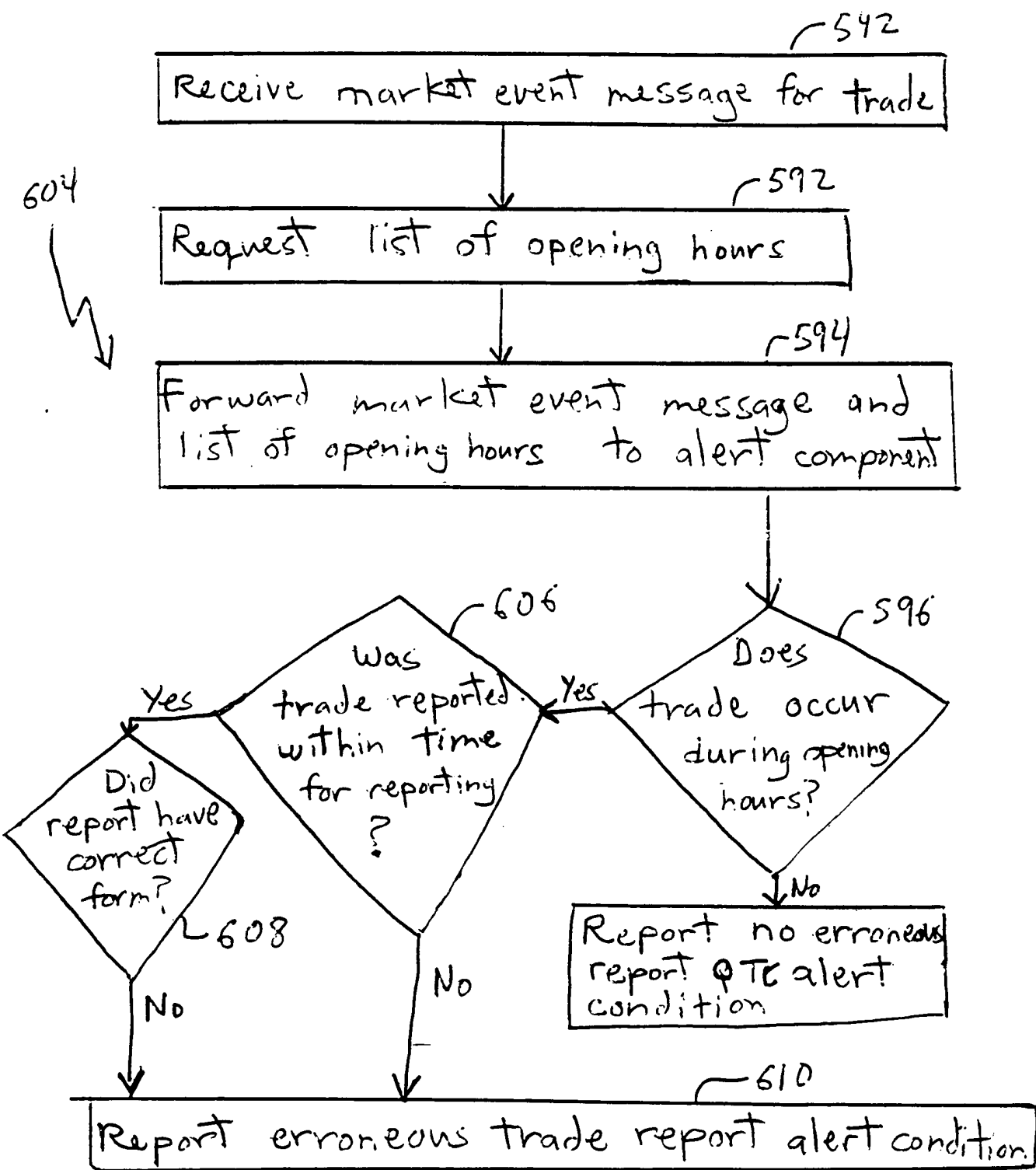
590 592 594 596 598 600 602



590

FIG. 33

604



F16. 34

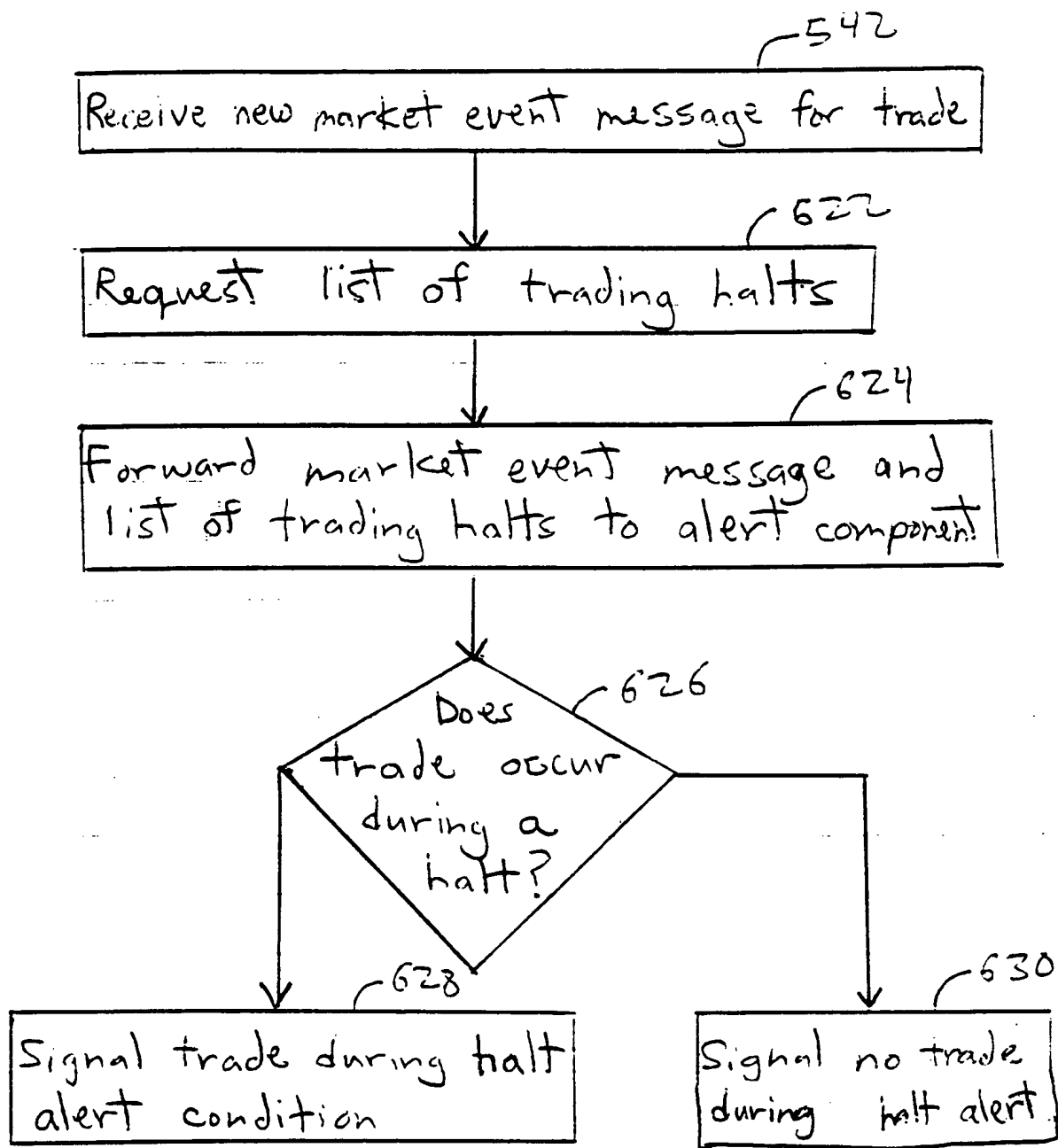
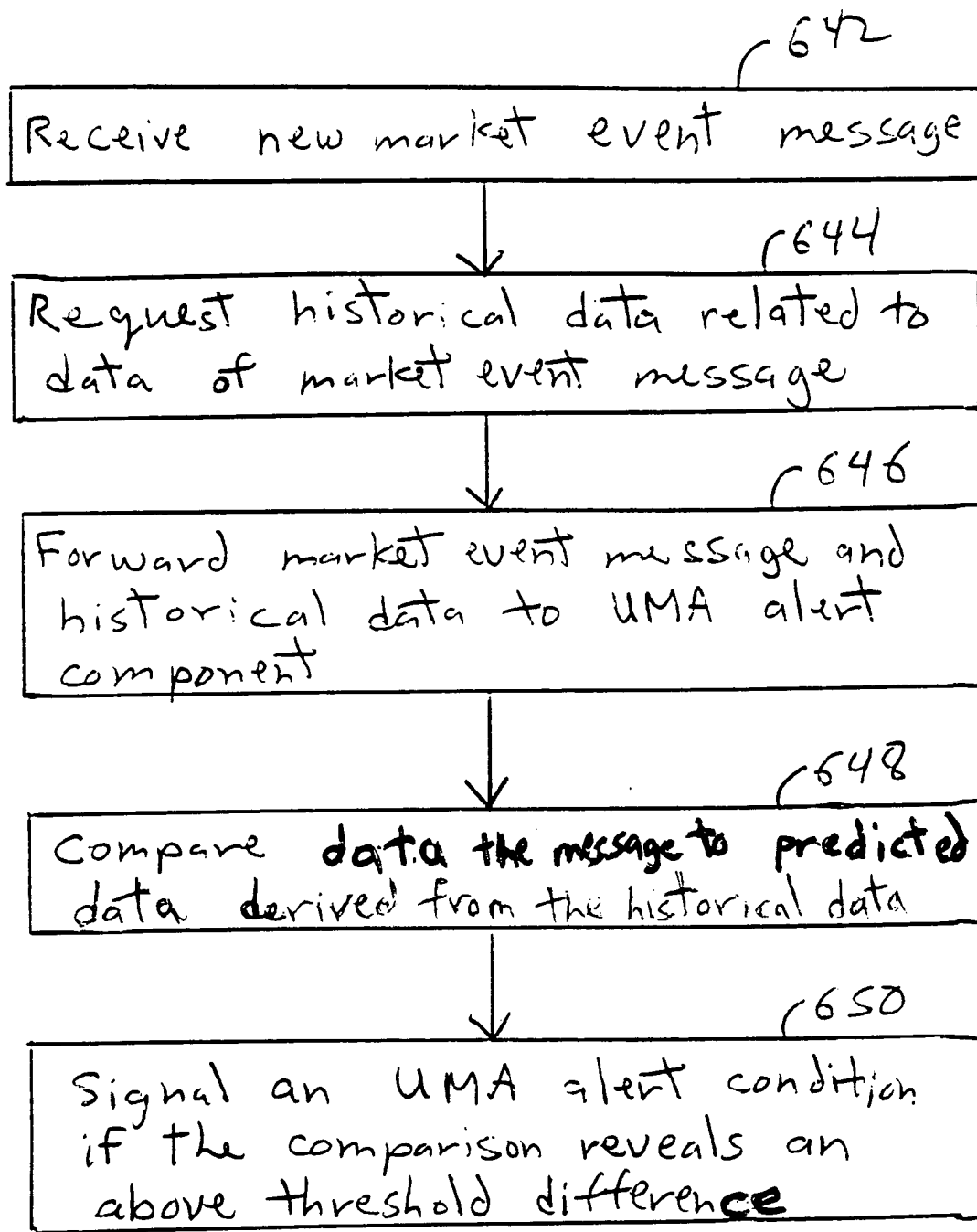


FIG. 35



640

FIG. 36

1-678



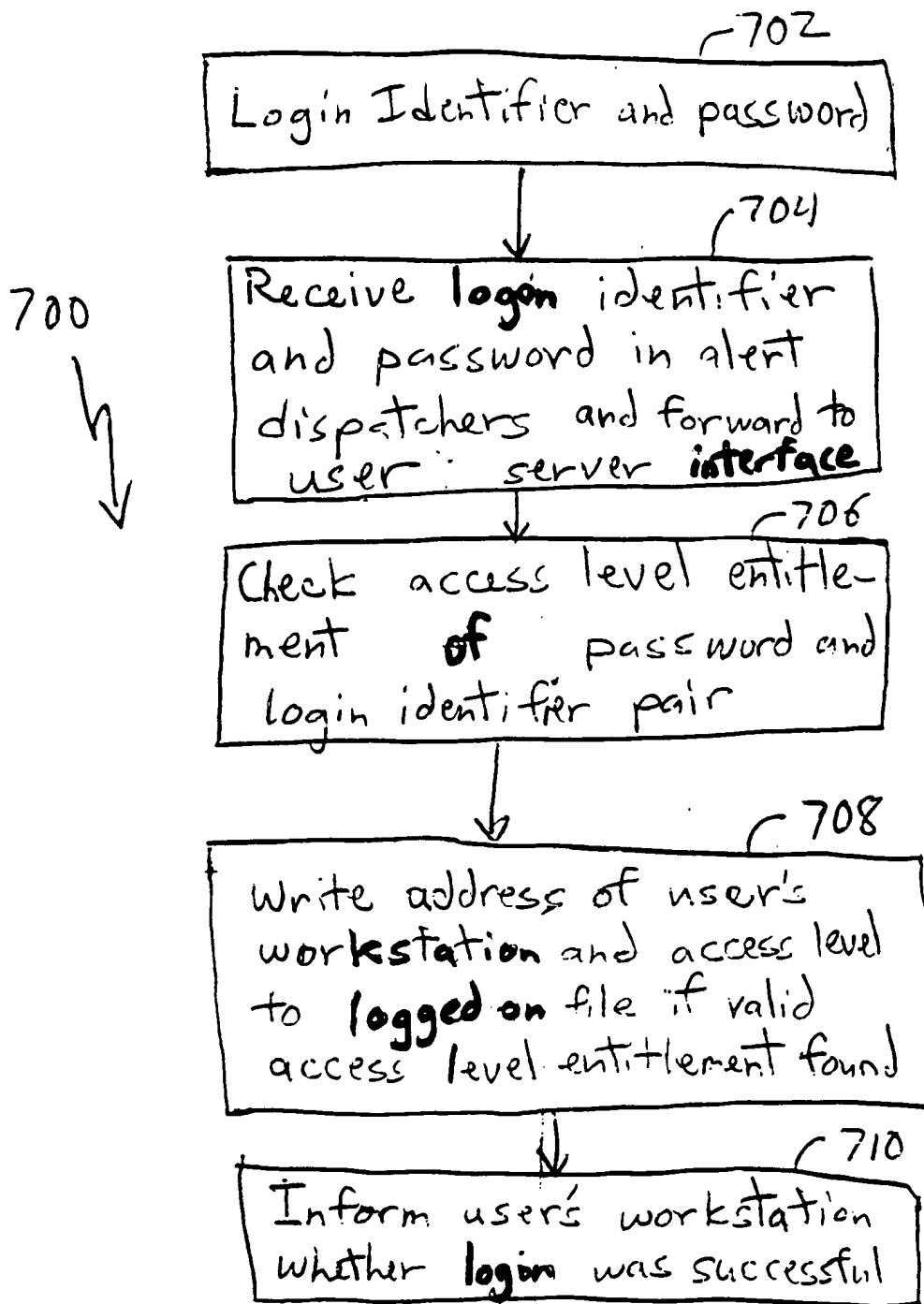


FIG. 39

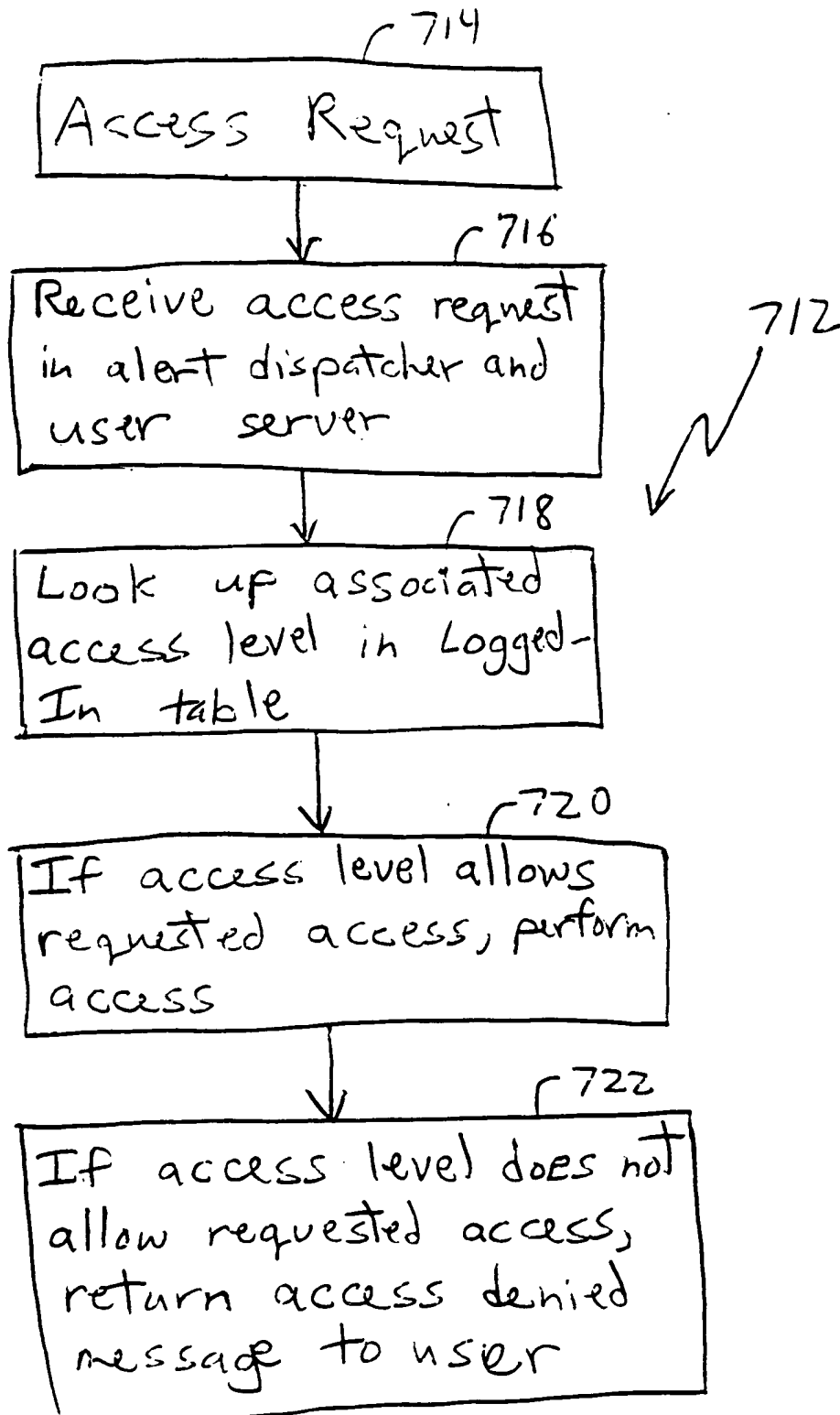
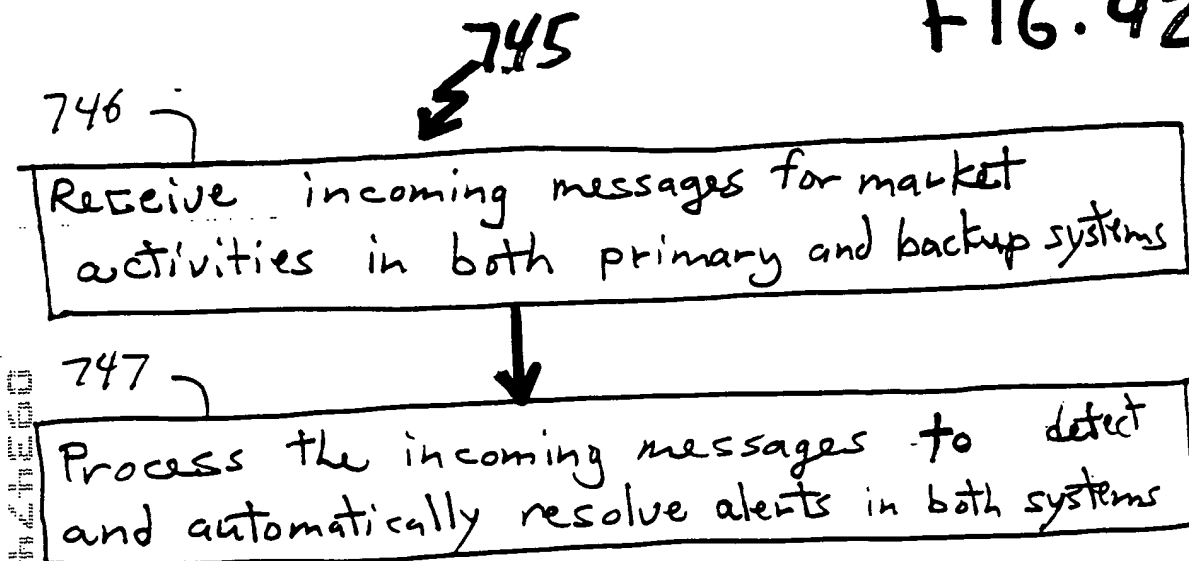


FIG. 40

FIG. 42A



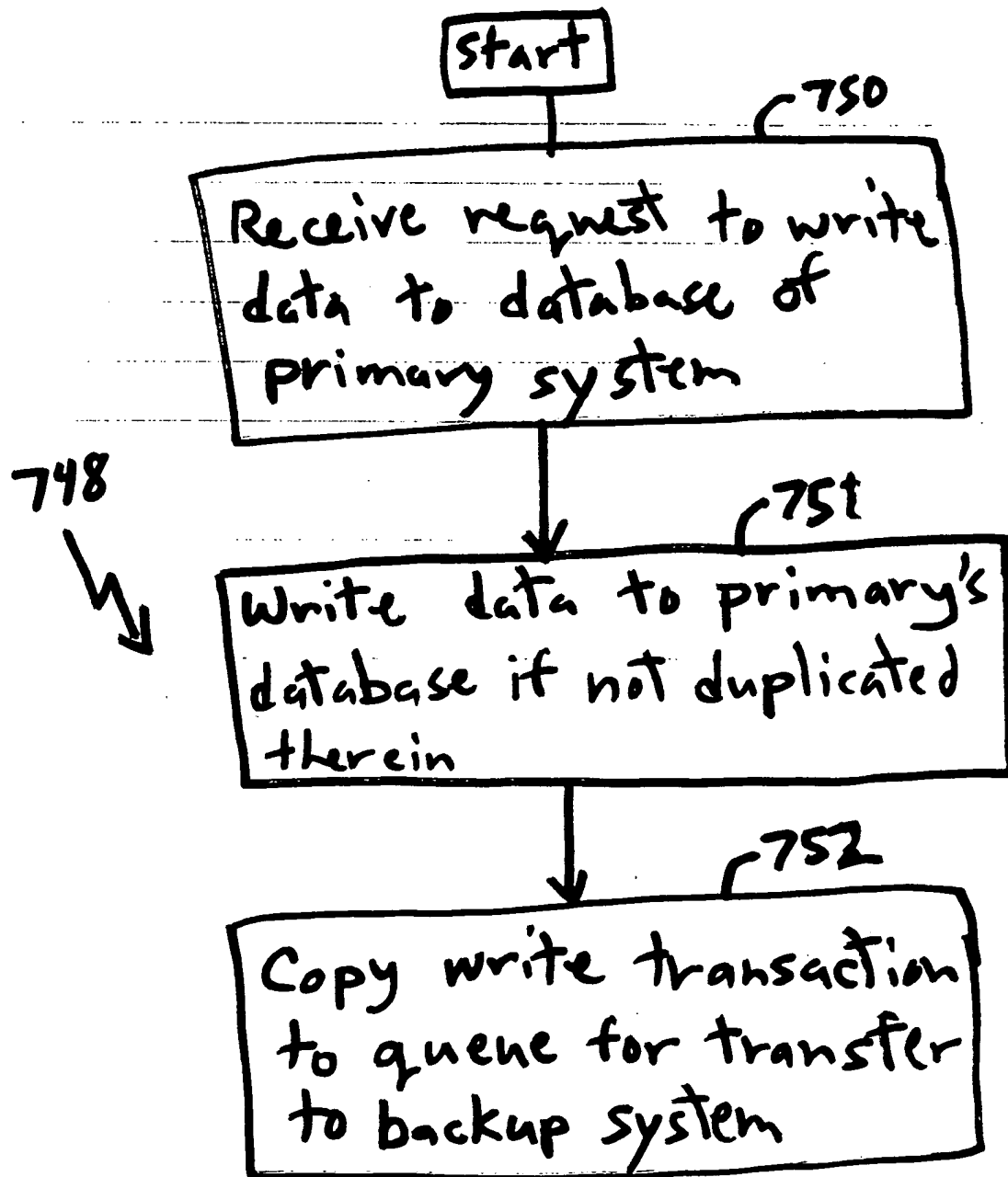


FIG. 42B

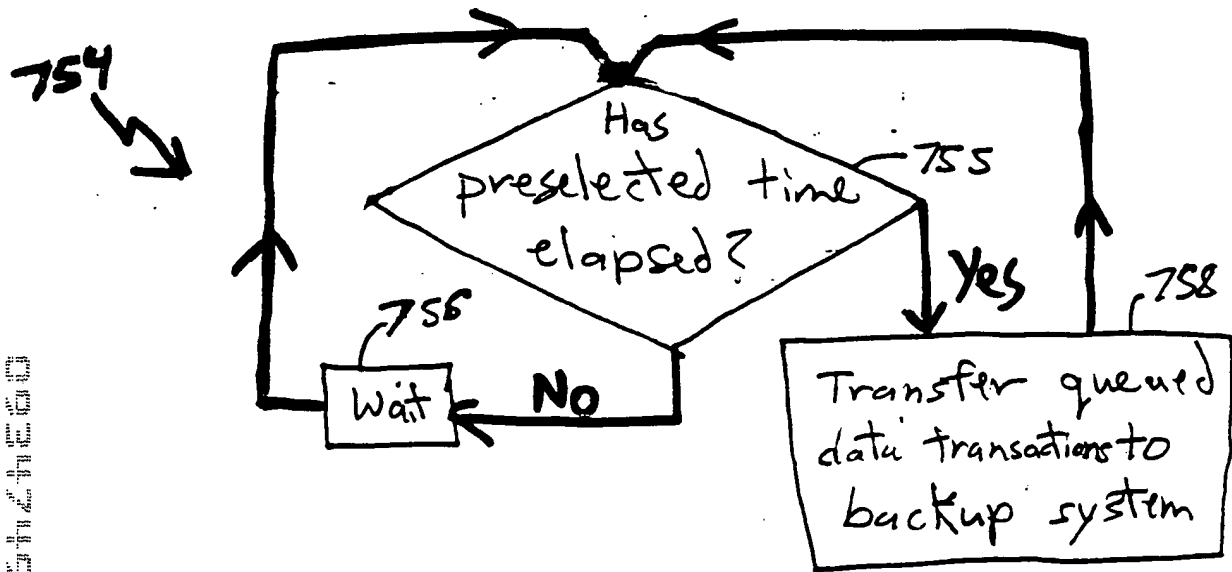


FIG. 42C

6620-01-000-0000

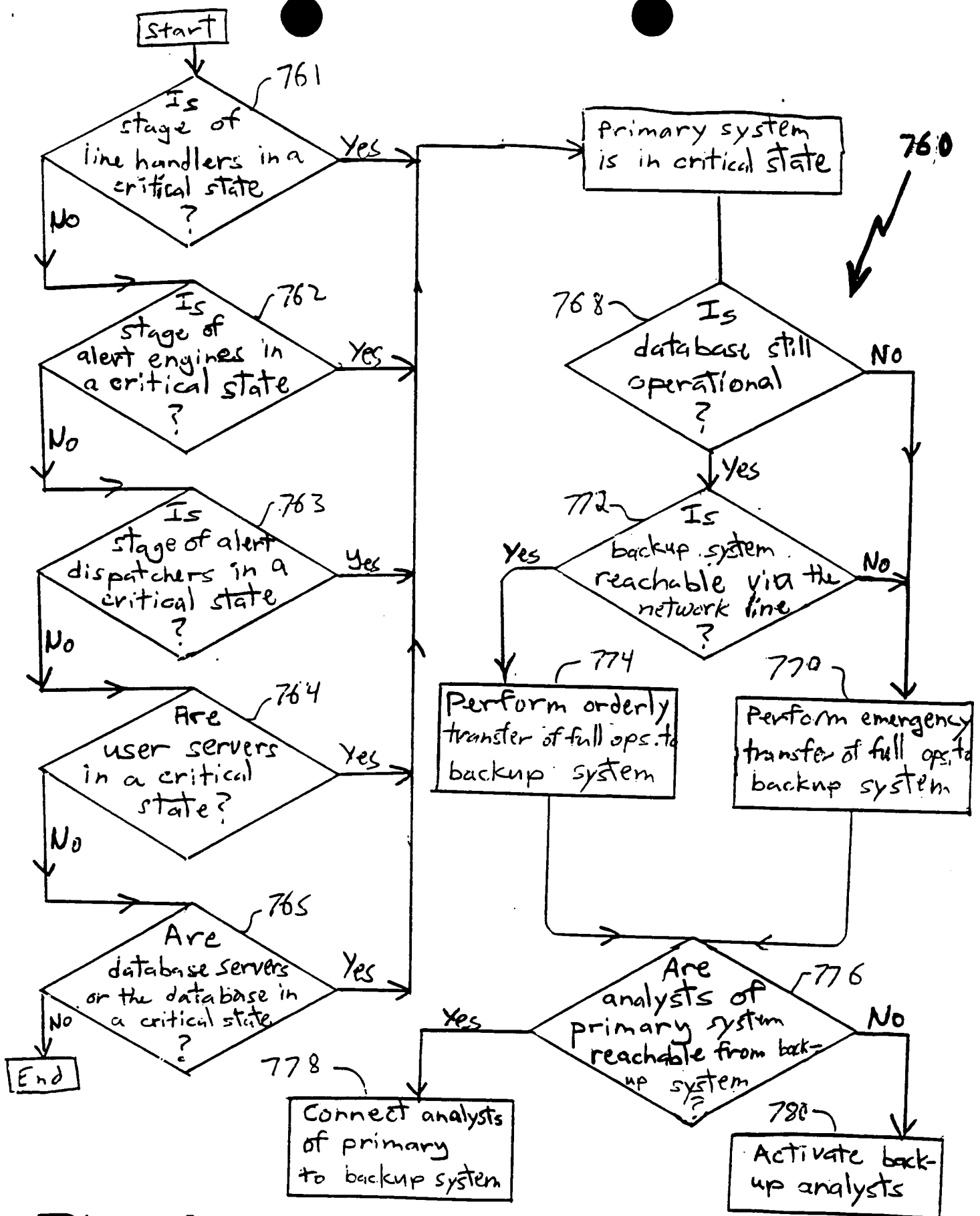


FIG. 43

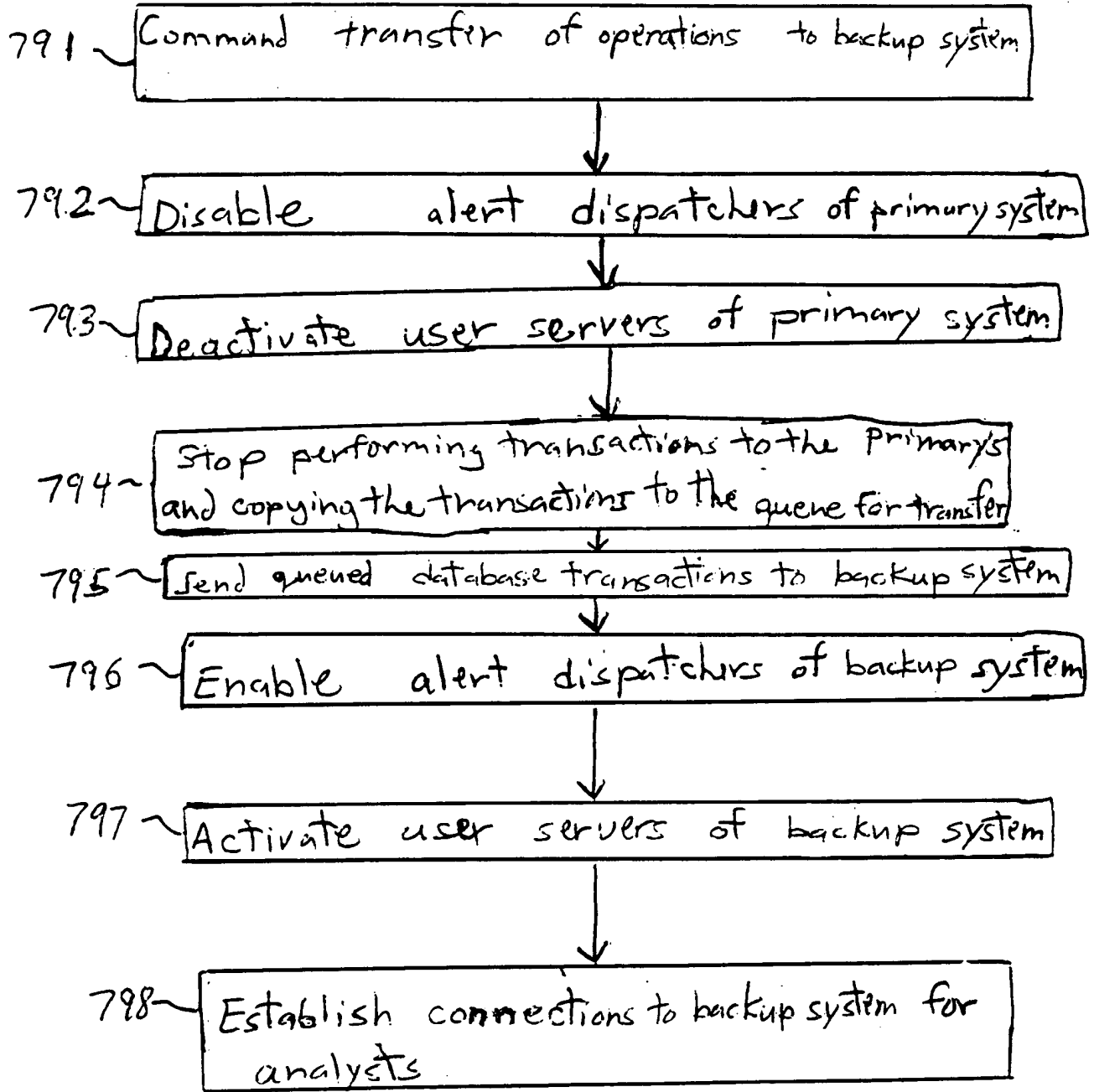
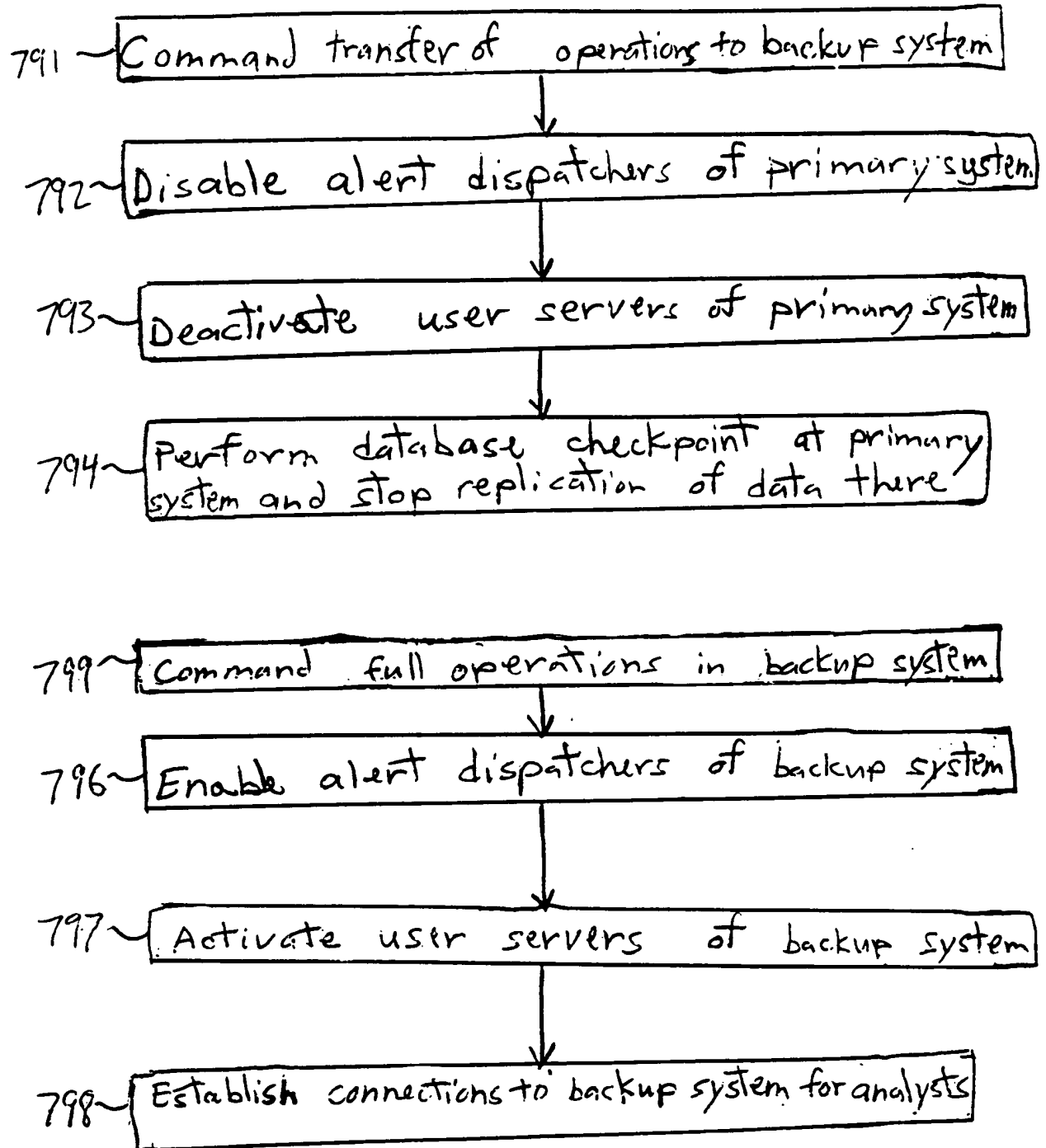


FIG. 44

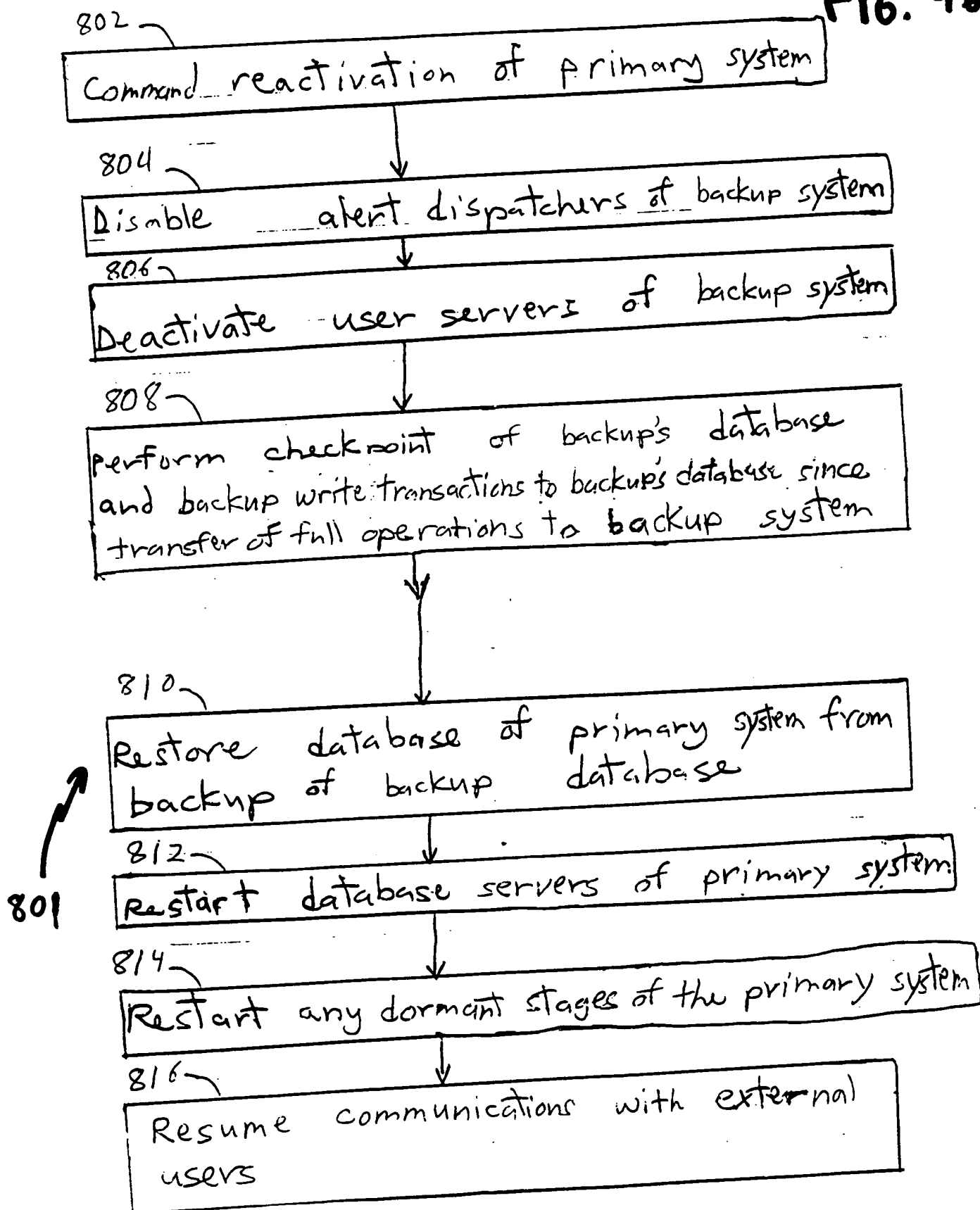
790



800

F16.45

F16. 46



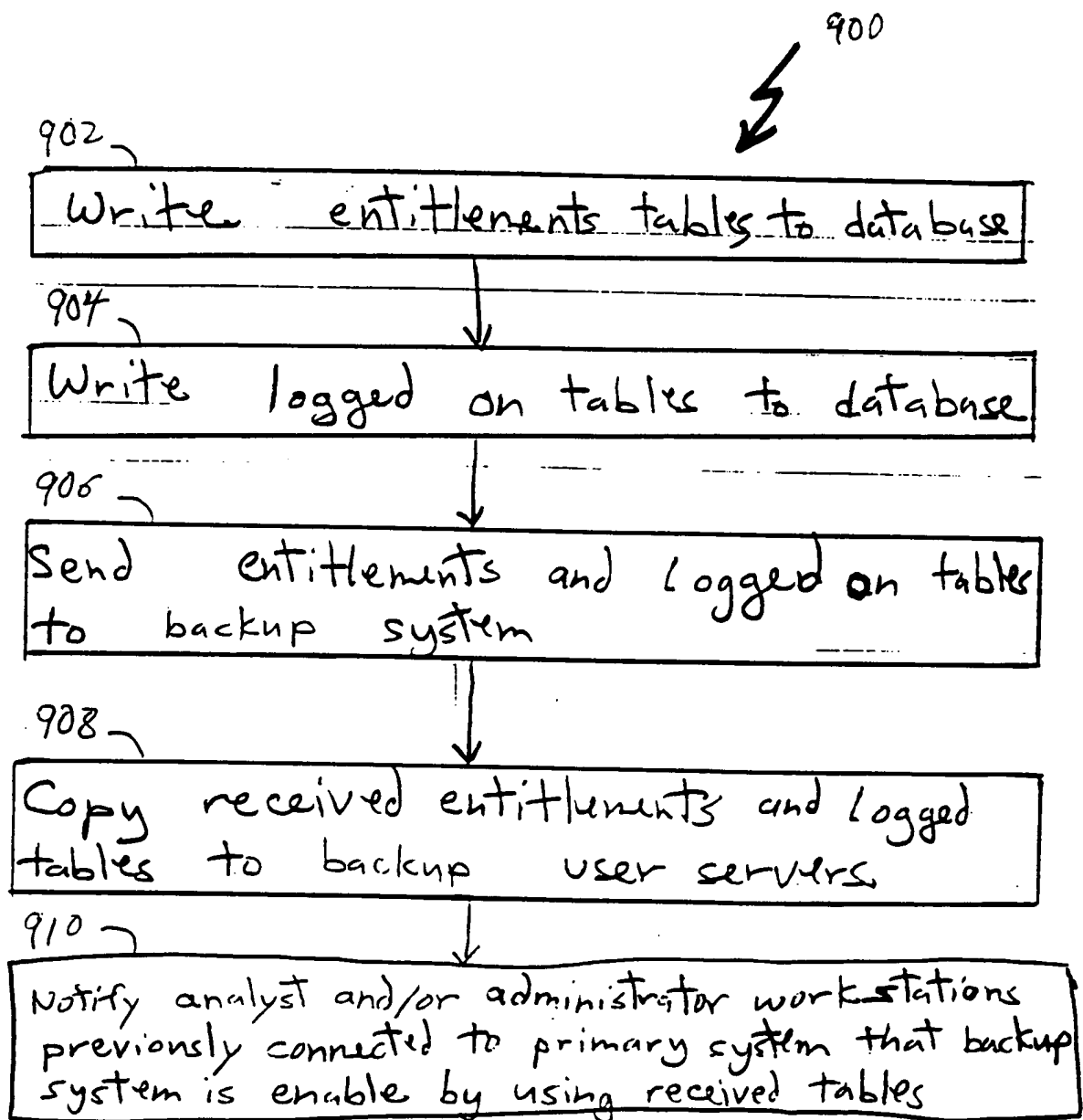


FIG. 48